

CBO PAPERS

SELECTED SPENDING AND REVENUE OPTIONS

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CBO's regular annual report, *Reducing the Deficit: Spending and Revenue Options*, was not published in 1991 because the additional work load associated with the 1990 budget summit agreement precluded its timely completion. At the request of the staff of the House Committee on the Budget, CBO reestimated and updated selected deficit options for this report.



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PART I SPENDING OPTIONS

**050-1 REDUCE THE NAVY TO 11 AIRCRAFT
CARRIER BATTLE GROUPS**

Savings from Admin. Request and CBO Baseline	Annual Savings (In millions of dollars)						Cumulative Six-Year Savings
	1992	1993	1994	1995	1996	1997	
Budget Outlays	2,600	2,200	500	4,200	1,600	1,200	12,300
Outlays	290	770	1,130	1,550	2,090	2,350	8,180

The size of the Navy is largely determined by the number of aircraft carrier battle groups that it operates. This number in turn directly influences the Navy's need for other types of ships, combat aircraft, bases on shore, operating funds, and personnel. An aircraft carrier battle group consists of an aircraft carrier and the ships and submarines that escort it.

The Navy currently has a total of 14 aircraft carriers. The Navy plans to retire three carriers from active service and accept delivery of one new carrier by 1995. These changes would result in a fleet of 12 carriers in 1995. (This option refers to the total number of aircraft carriers, including carriers that are undergoing a service life extension program or a complex overhaul with nuclear refueling.)

This option examines the budgetary effects of reducing the fleet to 11 carriers in 1992 through 1997. The option would also retire two carrier air wings by 1995. The option is consistent with statements by the Chairman of the Senate Committee on Armed Services that the Navy should be able to meet its commitments with 10 to 12 aircraft carriers.

The primary advantage of this option is its savings. Compared with the Administration's plan, this option would save \$2.6 billion in 1992 and a total of \$12.3 billion from 1992 through 1997. Much of the savings would result from reductions in the Navy's procurement budget. For example, because the smaller fleet would require fewer escort ships, the Navy might be able to reduce its planned purchases of DDG-51 Arleigh Burke class guided-missile destroyers from 22 to 18 between 1992 and 1997. The Navy might also cancel procurement of a new aircraft carrier in 1995 and an AOE-6 Supply class combat logistics ship in 1992. This option assumes these cancellations, although other factors--such as the large number of carriers that will have to be ordered by early in the next century to replace ships retiring by 2010--might argue against the cancellations, even for an 11-carrier fleet. With the cancellations, procurement savings would total \$2.3 billion in 1992 and \$7.8 billion from 1992 through 1997. Reducing the number of aircraft carriers would also lower the Navy's requirements for naval combat aircraft. However, because the Navy's aircraft fleet is aging rapidly from 1992 through 1997, no savings from aircraft procurement are assumed.

Savings would also be realized through reduced operating and support (O&S) costs. Compared with the Administration's plan, the smaller fleet and reduced number of carrier air wings resulting from this option would require fewer sailors and be less expensive to operate, generating savings in O&S costs of \$300 million in 1992 and \$4.5 billion from 1992 through 1997. These estimates include savings in portions of the Navy's budget that are not directly tied to operating units such as ships and aircraft squadrons, but for which savings nevertheless could reasonably be expected.

The primary disadvantage of this option is that the Navy would probably have to reduce the number of aircraft carriers it deploys forward (away from U.S. shores) in peacetime. As a result, carriers might be farther from trouble spots when crises erupt, which would delay the arrival of U.S. naval forces. Whether the delay in arriving would be significant depends on the nature of the crisis and the importance of early U.S. presence to a favorable outcome. For some crises since World War II, the United States has had some advance warning, which allowed carrier battle groups sufficient time to travel to the region. For other events, such as Iraq's invasion of Kuwait, there has been little or no warning.

In addition, the Navy would have fewer carriers available to respond to crises or to use in a major war. Because of routine maintenance and training schedules, the Navy would not be able to field the full 11 carriers on short notice during a crisis. Whether reducing the number of carriers available to respond to crises has an important influence on military capabilities is uncertain. In most of the crises since World War II, the Navy has deployed one to three aircraft carriers, which an 11-carrier fleet could accomplish with relative ease. However, marshaling a force of six carriers--the size of the force deployed to the Persian Gulf and surrounding seas during the recent war against Iraq--would probably be very difficult under this option.

050-2 CANCEL THE SSN-21 SEAWOLF SUBMARINE PROGRAM

	Annual Savings (in millions of dollars)						Cumulative Six-Year Savings
	1992	1993	1994	1995	1996	1997	
Savings from CBO Baseline							
Budget Authority	70	180	340	410	2,330	1,310	4,640
Outlays	240 ^a	260 ^a	220	170	230	500	1,620
Savings from Administration's Request							
Budget Authority	240	370	340	410	2,330	1,310	5,000
Outlays	240	320	330	270	280	530	1,970

- a. Outlay savings in 1992 and 1993 are higher than those for budget authority because savings from fast-spending research and development funds are only partially offset by costs from slower-spending procurement funds.

The SSN-21 Seawolf class submarines are intended to counter projected improvements in Soviet submarines. The Congress funded the first SSN-21 in 1989 and the second in 1991, for delivery in 1995 and 1996, respectively. Like the SSN-688 Los Angeles class submarines that precede them, the SSN-21s are attack submarines designed to detect and destroy enemy submarines and surface ships and to launch cruise missiles against ships and targets on land. The sixty-second and final SSN-688 was funded by the Congress in 1990. This option cancels the SSN-21 program and instead buys additional SSN-688s.

According to the Navy, the SSN-21s will have many advantages over the SSN-688s: they will be able to dive deeper, carry more weapons, and operate more quietly at higher speeds than the SSN-688s. The SSN-21s also will have advanced sensors for detecting enemy submarines and a more powerful computer system coordinating their sensors and weapons.

These improvements have been costly. Each SSN-21 will cost about twice as much as the SSN-688s. The high cost has forced the Navy to reduce its planned procurement of the SSN-21 from an average of about three per year to one per year from 1992 through 1997, with the exception of 1996, when the Navy plans to buy two SSN-21s. This procurement rate, coupled with the projected retirements of older classes of attack submarines, will dramatically reduce the size of the attack submarine fleet in the late 1990s and into the next century. If, for example, the Navy continues to buy one SSN-21 per year after 1997, then the attack submarine force would decline from 87 at the end of 1991 to 74 in 2005 and to 69 in 2010.

Thus, the Navy must address a critical trade-off as it plans its submarine force. Either the service can buy fewer submarines that are more expensive and presumably more capable, or it can buy more that are less expensive and presumably less capable. The Navy recently announced its intention to study a new class of submarine that will be less expensive than the SSN-21, but Navy officials admit that such an effort would entail many years of design work. With a new, less expensive class of submarine many years away, by ending SSN-688 procurement in 1990 and proceeding with the SSN-21 the Navy has clearly chosen to procure and operate a fleet of fewer, more expensive submarines. This decision is based, in part, on the assumption that Soviet submarines will improve in the future. The Navy has testified before the Congress that the SSN-688 submarines are superior to all submarines that the Soviet Union currently fields.

This option would maintain a larger fleet of attack submarines by buying one SSN-688 in 1992 and two per year thereafter. A key benefit is that the fleet would include 82 attack submarines by 2005 (compared with the 74 estimated above) and 82 also in 2010 (compared with 69). This larger fleet could allow the Navy to carry out missions that would be impossible with the smaller fleet assumed under the Administration's plan. The Navy would have more submarines available to respond to crises, deploy regularly in peacetime, and support training.

In addition, this option would result in reduced costs. Relative to the CBO baseline, buying one SSN-688 in 1992 and two per year thereafter would save \$70 million in 1992 and \$4.6 billion from 1992 through 1997. Relative to the Administration's plan, savings would be \$240 million in 1992 and \$5 billion over the next six years.

The primary disadvantage of this option is that the Navy would forgo many of the improvements promised in the SSN-21. This disadvantage could be important, especially if, in the future, the Soviet Union produces more capable submarines in large numbers and presents a more immediate military threat to the United States than it appears to today. Some experts assert that the SSN-688 design could be improved to offset partially the increased capability that would be lost if the SSN-21 is canceled. The Navy, however, claims that the SSN-688s have no extra space aboard to permit such improvements.

050-3 REDUCE FUNDING FOR THE MODERNIZATION OF ARMORED SYSTEMS

	Annual Savings (In millions of dollars)						Cumulative Six-Year Savings
	1992	1993	1994	1995	1996	1997	
Savings from CBO Baseline							
Budget Authority	220	470	570	420	250	540	2,470
Outlays	120	330	490	460	330	430	2,160
Savings from Administration's Request							
Budget Authority	530	470	570	420	250	540	2,780
Outlays	290	440	510	470	340	430	2,480

The Army's Armored System Modernization (ASM) program would develop new systems to replace the current generation of tanks, infantry fighting vehicles, and other armored combat and support vehicles. These new vehicles would replace the M1A1 tank, the Bradley fighting vehicle, the M109 155mm howitzer, and three other armored vehicles currently in the Army's inventory. A separate program would procure a new armored gun for the Army's light forces. About \$3.4 billion would be spent over the next six years to develop and procure some of these new systems. Reports indicate that the total cost of the program, including procurement funds, could be at least \$63 billion.

As currently structured, the ASM program would first develop a new antitank vehicle to replace the current 1960s-vintage Improved Tow Vehicle, followed by a new tank, a new supply vehicle for artillery, a new 155mm howitzer, a new combat engineering vehicle, and, finally, a new infantry fighting vehicle. A seventh system, known as the armored gun system, would be based on an existing model and would be purchased off-the-shelf. Of these seven new systems, three would directly replace systems that entered production in the 1980s and have not yet completed or have recently completed production, namely, the M1 tank, the Bradley fighting vehicle, and the field artillery ammunition support vehicle (FAASV). Furthermore, the Army is still producing a new combat engineering vehicle, the M9ACE, which is also less than a decade into production. It is doubtful that these systems will be outdated 10 years from now when their successors, products of the ASM program, are scheduled to enter production. Indeed, based on the lifetime of the Army's 1960s-vintage M60 tank, which is still in use, the M1 tank may not need replacement for 20 years, when the oldest M1s will be 30 years old. Finally, the reduced threat from the Warsaw Pact and the Soviet Union in Europe calls into question the need for highly sophisticated armored systems.

This alternative would reduce funding for the entire ASM program to \$100 million a year. All of the armored systems slated to be replaced by products of the ASM program either have entered production or have been modified, upgraded, and improved since 1980. The remaining development funding of \$100 million a year for the ASM program could be used to investigate potential improvements to the Army's already capable armored forces, rather than to develop replacements. This alternative would not reduce procurement funds for the armored gun system, which is intended to replace the one Army armored system generally acknowledged to be obsolete, the M551 Sheridan. Relative to the Administration's plan, this alternative would save \$530 million in 1992 and \$2.8 billion over the next six years. Relative to the CBO baseline, savings would total \$220 million in 1992 and \$2.5 billion from 1992 through 1997.

Reducing funding for the ASM program, however, would undoubtedly delay the fielding of the next generation of Army armored systems. Although the M1 tank, the Bradley fighting vehicle, the field artillery support vehicle, and the M9ACE have all been purchased in the last decade or so, the remaining two systems--the Improved TOW Vehicle and the M109 howitzer--are much older. Both systems have undergone extensive upgrades in the past decade, but they are carried on 1960s-vintage chassis. Furthermore, Members of Congress have expressed support for the expeditious fielding of replacements for these weapons. This alternative would not respond to those Congressional concerns.

050-4 RESTRUCTURE THE ARMY'S FAAD PROGRAM

Savings from Admin. Request	Annual Savings (In millions of dollars)						Cumulative Six-Year Savings
	1992	1993	1994	1995	1996	1997	
Budget Authority	0	100	400	300	300	300	1,400
Outlays	0	-40 ^a	10	180	300	310	760

a. Research and development appropriations spend at a faster rate than procurement. Outlay costs in 1993 for developing a missile described in this alternative exceed outlay savings associated with canceling ADATS in the same year.

Following the cancellation of the Sergeant York Division Air Defense Gun (DIVAD) in August 1985, the Army initiated a program to improve its ability to defend troops positioned well forward in the battle area against enemy aircraft, particularly helicopters. This Forward Area Air Defense (FAAD) program contains five elements designed to (1) improve communications among air defense and sensors; (2) purchase a new weapon to perform the mission of the canceled DIVAD; (3) procure a system, called Avenger, to provide air defense for the rear of the battle area; (4) develop a system to attack enemy helicopters hiding behind hills, trees, or buildings; and (5) improve the air defense capability of the Army's existing helicopters, tanks, and fighting vehicles.

This alternative would restructure the FAAD program, shifting the emphasis from sophisticated and expensive dedicated (that is, devoted to a single purpose) air defense weapons, to programs for upgrading Army tanks, fighting vehicles, and helicopters so that they will be able to protect troops from enemy aircraft. Since the principal threat to the Army's forward area comes from helicopters, the program would provide all Army weapons with some ability to destroy enemy helicopters. For example, each fighting vehicle would be equipped with missiles for use against either tanks or helicopters. Army helicopters would carry missiles for destroying enemy helicopters, and Army tanks would carry ammunition with enhanced capability against hovering helicopters.

With each Army tank and fighting vehicle capable of defending troops against enemy helicopters, dedicated air defense weapons would be needed primarily to counter fixed-wing aircraft. The Stinger missile system, currently used by the Army, is designed to destroy fighter-bomber aircraft. The vehicle-mounted version of Stinger, which is being bought as part of the FAAD program, could perform this role.

There would be no savings under this alternative in 1992 relative to the Administration's plan, but \$1.4 billion could be saved from 1993 through 1997. Savings reflect termination of the Air Defense Antitank System (ADATS) program, selected by the Army as the follow-on to the DIVAD program. This system, already

in use with the Canadian military, has experienced problems as it has been modified for use by the U.S. Army. These problems caused the Army to delay further purchases of the system until 1993. Savings resulting from canceling ADATS would be partially offset by the costs of developing a missile to provide the Army's fighting vehicles with an air defense capability against helicopters.

Restructuring the FAAD program might provide better defense from enemy helicopters than the Army's plan. The ability to destroy helicopters is, in part, a function of the total number of weapons that can intercept helicopters at a specific range. By this measure, this option could eventually provide twice as much capability as the Army's plan. Such a restructuring of the FAAD program, however, would require infantry and tank commanders to assume greater responsibility for air defense, a situation that could adversely affect their ability to perform their primary mission of destroying tanks.

050-5 CANCEL THE C-17 AIRLIFT AIRCRAFT

	Annual Savings (In millions of dollars)						Cumulative Six-Year Savings
	1992	1993	1994	1995	1996	1997	
Savings from CBO Baseline							
Budget Authority	1,100	800	700	600	600	600	4,400
Outlays	350	450	530	520	550	580	2,980
Savings from Administration's Request							
Budget Authority	2,800	4,200	4,000	4,000	3,600	3,600	22,200
Outlays	440	1,040	2,150	3,070	3,520	3,690	13,910

The C-17 is a four-engine transport aircraft that can carry its maximum payload of about 162,000 pounds of cargo for a distance of 2,400 nautical miles without aerial refueling. It is the Air Force's choice as the next-generation strategic airlift aircraft to replace the C-141 Starlifter; it also is expected to play an important role in meeting transport needs within a combat theater, and will lessen requirements for aircraft such as the C-130 that traditionally assume that role.

This option would cancel the C-17 program, saving \$1.1 billion in 1992 and \$4.4 billion over the six-year period 1992 through 1997, compared with the CBO baseline. Measured against the Administration's plan, savings would be \$2.8 billion in 1992 and \$22.2 billion over the six years. Part of these savings would no doubt be spent to replace some of the capability that the C-17 would have supplied.

The C-17 program has a long and troubled history. The Air Force's original plan was to purchase 210 C-17s by the year 1998. But the C-17 program was among those subject to the Secretary of Defense's Major Aircraft Review in 1990. After that review, the Secretary announced a reduction of 43 percent in the number of C-17s to only 120 aircraft. Administration estimates in September 1990 indicated that the reduction in quantity would save \$10.5 billion, or 25 percent, of the total C-17 costs included in the 1991 budget, but the current budget indicates that savings would total only \$6.5 billion, or 16 percent. Although the reduction in quantity is still estimated to save money, it has resulted in a 48 percent increase in total program unit costs--from \$199 million in last year's budget to \$294 million this year. It also meant forgoing the Department of Defense's goal of raising airlift capability to 66 million ton-miles a day and, instead, maintaining current airlift capability of about 48 million ton-miles a day.

Canceling the C-17 aircraft would have little immediate effect on U.S. airlift capability. The 109 C-5 and 234 C-141 aircraft operated by the Military Airlift Command, and the 57 KC-10 cargo/tanker aircraft operated by the Strategic Air

Command, together with some 150 civilian cargo aircraft available to DoD in an emergency, give the United States an unparalleled capability to move forces rapidly. This capability was amply demonstrated during Operation Desert Shield when about 99,000 tons of equipment and materiel were delivered in the first 45 days of operations.

The C-141 fleet, however, is about 25 years old on average and will have to begin retiring in 1997 unless major modifications are made. The Department of Defense could extend that life for another 10 to 15 years by replacing elements of the aircraft's wing structure. The cost of such modifications is at issue: a DoD official has testified that the cost might be \$12 billion or more, if new engines and new wing boxes were procured; Lockheed Corporation claims that a more modest program could fix the wings for about \$3 billion and that new engines are not necessary.

Nor is extending the C-141's life the only alternative. Production of C-5Bs could be resumed, at a unit cost of about \$184 million, compared with the \$294 million estimate for each C-17. Because the average payload for a C-5B is about 40 percent higher than that of a C-17, fewer C-5s would be needed to replace the 120 C-17s. CBO's calculations, based only on payload comparisons, call for 85 C-5Bs at a total cost of \$15.7 billion, compared with \$26.8 billion to complete the C-17 program.

This option, however, is strongly opposed by the Air Force and the Office of the Secretary of Defense. They say that, because the C-17 is being designed to operate at a higher rate of use than the C-5B is capable of achieving, 120 C-5Bs would be required to offset the loss of the C-17. Roughly 120 C-130s would be required to replace the role the C-17 would play in moving cargo over shorter ranges. Including these additional factors, costs for the C-5 approach could run as high as \$24 billion. In addition, DoD officials have expressed concern about the higher cost of operating the C-5 in peacetime, when its greater capabilities are generally less useful, as well as about its inability to use smaller airfields efficiently.

**050-6 TERMINATE PROCUREMENT OF TOMAHAWK MISSILES
THAT CARRY NUCLEAR WARHEADS**

Savings from Admin. Request and CBO Baseline	Annual Savings (In millions of dollars)						Cumulative Six-Year Savings
	1992	1993	1994	1995	1996	1997	
Budget Authority	70	70	70	70	0	0	280
Outlays	10	30	60	70	60	40	270

The Tomahawk sea-launched cruise missile (SLCM) is a long-range, unmanned, jet-powered missile, designed to attack targets on land and sea from a variety of platforms including battleships, Arleigh Burke destroyers, Los Angeles class submarines, and cruisers. The missile can be configured to carry either a nuclear or a conventional warhead and can be launched from a range exceeding 1,000 nautical miles. Over the life of the program, the Navy is expected to procure a total of 3,830 Tomahawk missiles, of which 637 will be the nuclear land-attack version (TLAM/N). By the end of fiscal year 1991, the Navy will have procured a total of 2,830 missiles, roughly 400 of which will be the nuclear version. The Navy plans to procure about 200 Tomahawk missiles annually through 1995. Nuclear Tomahawks would be procured at the rate of 60 per year in 1992, 1994 and 1995, and at the annual rate of 58 missiles in 1993. No Tomahawks would be procured beyond 1995.

This option would terminate the procurement of TLAM/N cruise missiles after 1991, but would not affect production of the conventional types of Tomahawks used in the Persian Gulf war. Compared with the Administration's plan, this option would save \$70 million in 1992 and \$280 million over the next six years. These savings exclude the costs of nuclear warheads, which are classified.

Sea-launched cruise missiles armed with nuclear warheads provide an additional measure of deterrence against nuclear attack. They increase the number of platforms that can launch a counterattack, making it more difficult for the attacker to minimize damage to itself. To the extent that the additional 238 nuclear Tomahawks add to the United States' deterrent posture, this option would reduce that deterrent.

Conversely, recent events may reduce the need for nuclear SLCMs. If a Strategic Arms Reduction Talks (START) treaty can be concluded, nuclear arsenals could be reduced in the near future. Moreover, the Soviet withdrawal from Europe reduces the likelihood that a crisis in Europe could develop into a nuclear war. In an era of reduced superpower tension, the chance of conventional conflict with countries outside the NATO/Warsaw Pact theater could increase, and it may be better to invest in conventional rather than nuclear forces. Finally, the 238 nuclear Tomahawks would add little to the U.S. arsenal of more than 25,000 tactical and strategic nuclear warheads.

050-7 TERMINATE PRODUCTION OF THE B-2 BOMBER

	Annual Savings (In millions of dollars)						Cumulative Six-Year Savings
	1992	1993	1994	1995	1996	1997	
Savings from CBO Baseline							
Budget Authority	1,800	3,500	4,200	4,600	4,600	5,200	23,900
Outlays	210	1,170	2,540	3,590	4,220	4,580	16,310
Savings from Administration's Request							
Budget Authority	2,200	3,700	4,900	5,400	4,500	4,200	24,900
Outlays	100	710	1,930	3,180	4,180	4,640	14,740

The B-2 bomber, also known as the Stealth or Advanced Technology bomber, remains a high priority of the Department of Defense. According to the Pentagon, 15 aircraft have been authorized so far, and funding will be requested for 60 more over the next several years, including four this year (for fiscal year 1992). This year's request totals \$4.8 billion--\$3.2 billion for procurement of the four aircraft and associated spares, and \$1.6 billion for research, development, test, and evaluation (RDT&E). Terminating the B-2 program at 15 aircraft as envisioned in this option would save less than the \$4.8 billion requested by the Administration because the development program would be completed and the five RDT&E aircraft converted to the same combat configuration as the 10 production aircraft. Nevertheless, it would still save an average of \$4 billion per year through 1997.

Advocates of the B-2 note that, despite encouraging political developments in the Soviet Union, the Soviet strategic threat remains. Soviet modernization programs continue at a vigorous pace, featuring the SS-18, SS-24, and SS-25 intercontinental ballistic missiles (ICBMs), the Bear H and Blackjack bombers, and the Delta IV submarine. The B-2 program counters these efforts by providing a bargaining chip for follow-on negotiations and by emphasizing development of advanced technologies in which the United States enjoys considerable advantages over the Soviet Union. Moreover, continued emphasis on a manned bomber makes it more difficult for the Soviet Union to focus its air defense on the cruise missile threat alone. If it is as difficult to see with radar as anticipated, the B-2 in particular would render ineffectual most current ground-based radars.

The B-2, however, is an extremely expensive aircraft to build, even now that most of the research and development work on the aircraft has been completed. This year's budget request reflects a procurement cost of nearly \$700 million per aircraft (not including spares, hangar facilities, or future sensor improvements that might be necessary). Moreover, even though the aircraft seems to be performing well in flight

tests, its design is so revolutionary that acquisition and maintenance costs could well escalate.

In addition, the main mission for which the B-2 is considered more promising than any other strategic system-- finding and attacking Soviet mobile missiles--is of questionable merit in principle, and of great difficulty in practice. Reducing the survivability of Soviet weapons could harm the future prospects for arms control and increase pressures for preemptive attack in a crisis. But even if the United States wished to develop the capability for this mission, the B-2 could prove incapable of performing it. The Pentagon acknowledges the difficulty of this mission and the absence of technologies for performing it; recent difficulties in finding Scud launchers in the small country of Iraq underscore these realities. Moreover, the Soviet military might respond to a U.S. capability to find mobile launchers by proliferating dummy launchers, interspersing anti-aircraft missiles with ICBMs in its mobile launchers, or building multiple simple shelters in which to hide missiles. This type of response would thwart U.S. efforts to find these targets and greatly complicate verification procedures associated with arms control.

Even without the B-2, the United States would retain a diverse strategic arsenal that would compare very favorably with Soviet forces--as measured by various quantitative indices, including the results of simulated nuclear warfare--well into the twenty-first century. It would retain a penetrating bomber in the B-1 Lancer aircraft, which the Air Force calls the best bomber in the world, and which is believed capable of penetrating Soviet air defenses well into the next century according to recent intelligence estimates. Finally, a fleet of 15 B-2 aircraft--comparable in number to the recently retired SR-71 reconnaissance fleet, and thus probably viable despite its small size--could be used for special-purpose conventional, nuclear, and reconnaissance missions even if it could not play a major role in the country's Single Integrated Operational Plan for nuclear war. In this regard, 15 B-2 aircraft would have as great a payload as the entire F-117 Stealth fighter fleet (which performed so effectively in the Gulf war), and several times the range of the F-117. As the Air Force has pointed out, 15 B-2 aircraft would be more than adequate to conduct operations such as the 1986 bombing of Libya and the bombing of key strategic targets in northern Iraq during the early phases of the Gulf war.

Terminating the B-2 might facilitate other long-term savings not included in the above table. Maintaining only 15, rather than 75, B-2 aircraft could yield operation and support (O&S) savings of about \$1 billion per year. Moreover, terminating the B-2 could make it possible to terminate conversion of the KC-135A aerial refueling aircraft to the KC-135R configuration. Without the B-2, the strategic bomber force might eventually be only two-thirds the size of the current one. This might justify scaling back the tanker fleet to about 700 KC-135A equivalents rather than the original Air Force goal of 1,000 equivalents. Excess KC-135A aircraft could then be retired, yielding savings in this decade of about \$1 billion per year, divided equally between modification costs and O&S costs.

050-8 REDUCE SPENDING FOR THE STRATEGIC DEFENSE INITIATIVE

	Annual Savings (In millions of dollars)						Cumulative Six-Year Savings
	1992	1993	1994	1995	1996	1997	
Savings from CBO Baseline							
Budget Authority	1,300	1,300	1,400	1,500	1,500	1,600	8,600
Outlays	670	1,190	1,330	1,410	1,470	1,550	7,620
Savings from Administration's Request							
Budget Authority	2,900	3,200	3,500	4,100	4,500	5,000	23,200
Outlays	1,490	2,750	3,220	3,720	4,190	4,610	19,980

Since 1984, the Department of Defense has invested over \$22 billion in the Strategic Defense Initiative (SDI) program to research and develop technologies that could lead to the deployment of a defense against ballistic missiles. Despite the efforts during this eight-year period, the fundamental questions in the SDI debate--whether defenses against a Soviet attack could work, whether they increase or reduce the likelihood that a crisis will develop into a nuclear war, and whether they would be worth the costs--remain unanswered.

Recognizing this uncertainty, this option would limit SDI funding to the amount required for a research and development (R&D) program and defer any decision about deploying strategic missile defenses. The Congressionally mandated Tactical Missile Defense Initiative (TMDI) would be sustained at the level proposed by the Administration, which would allow a tactical defense against short-range ballistic missiles to be deployed in the late 1990s. SDI funding would be held to \$1.7 billion in 1992 and kept constant in real terms through 1997, enough to maintain an R&D program as a hedge against the possibility that the Soviet Union develops its own strategic defense or that another country develops long-range missiles that threaten the United States. Compared with the Administration's plan, this option would save \$2.9 billion in 1992 and a total of \$23.2 billion over the next six years. Relative to the CBO baseline, savings would total \$1.3 billion in 1992 and \$8.6 billion from 1992 through 1997.

The Administration has shown strong support for SDI, proposing to increase funding to \$4.6 billion in 1992 and \$4.9 billion in 1993 compared with the 1991 appropriated level of \$2.9 billion. This increase is reflected in the table by the large difference in savings between the current request and the CBO baseline, which is adjusted only for inflation. The Administration's goal has been to deploy a "Phase I" ballistic missile defense sometime after the year 2000 that could intercept a sizable fraction of the long-range missiles that could be launched in a full-scale attack by the Soviet Union. This defense would feature space- and ground-based interceptors and

sensors. In response to the events in the Persian Gulf, however, the Administration has proposed merging defenses against short-range missiles (theater defenses) with a pared-down version of its Phase I system to provide some protection against limited or accidental attacks. The resulting system, called Global Protection Against Limited Strikes (GPALS), would include the same space- and ground-based interceptors envisioned for Phase I, but would deploy fewer of them. Although GPALS is a new interim goal for the SDI program, a full Phase I deployment remains the Administration's long-term objective.

To advocates of SDI, the Persian Gulf war has demonstrated both the value of ballistic missile defenses and the dangers of the proliferation of ballistic missiles. By combining theater and strategic defenses, the GPALS system addresses both the threat to U.S. forces and allies overseas from short-range missiles and the threat to the United States of an accidental Soviet launch or an attack by a future adversary armed with long-range ballistic missiles. This option would continue the Administration's plans to deploy theater defenses, but, by limiting the SDI program to research, it would not provide enough funds for full-scale development of defenses that address this second threat.

Critics of the SDI program contend that while the events in the Persian Gulf make the case for developing defenses against tactical ballistic missiles more compelling, they do not strengthen the case for space-based defenses such as the one proposed in GPALS and Phase I. With the exception of the Soviet Union and China, no country has demonstrated the ability to develop missiles in the near future with ranges long enough to threaten the United States. Moreover, it is unlikely that countries producing long-range missiles today would sell them to other countries because, unlike tactical missiles, these long-range missiles could be used against the country that supplied them. Nor would GPALS or Phase I provide protection from nuclear weapons delivered by aircraft or terrorists, a scenario that SDI critics find much more probable than a nuclear missile attack. They argue that the more immediate ballistic missile threat comes from tactical missiles of the sort used by Iraq against Israel and Saudi Arabia. By continuing TMDI funding at planned levels, this option addresses the threat that tactical missiles pose to U.S. troops and allies overseas.

This option offers several other advantages. A continued deferral of strategic defense deployment will keep the United States in compliance with the Anti-Ballistic Missile (ABM) Treaty, which also prohibits the Soviet Union from deploying large strategic defenses. Continuing compliance could avert a costly and dangerous arms race. Maintaining a vigorous research program would allow the development of some components of a ballistic missile defense as well as research on countermeasures to potential Soviet defenses, thus providing a hedge against a Soviet technological breakthrough that would allow them to deploy defenses quickly. It would also provide a hedge against a future adversary who has developed long-range ballistic missiles. To minimize this risk, critics argue, the United States could devote greater effort to controlling the proliferation of ballistic missile technology, which may prove to be an inexpensive alternative to building strategic defenses.

050-9 CANCEL THE NATIONAL AEROSPACE PLANE

Savings from Admin. Request and CBO Baseline	Annual Savings (In millions of dollars)						Cumulative Six-Year Savings
	1992	1993	1994	1995	1996	1997	
Budget Authority	300	300	250	280	300	300	1,730
Outlays	190	280	270	280	300	300	1,620

In January 1986, the Department of Defense initiated a joint effort with the National Aeronautics and Space Administration (NASA) to design and build a National Aerospace Plane (NASP) that can deliver civilian and military payloads into orbit from conventional runways. The NASP, or X-30 aircraft, is envisioned as an experimental hypersonic aerospace aircraft that will employ highly advanced propulsion, structures, and materials technologies.

In 1987, DoD estimated that it would cost \$3.1 billion to develop, build, and flight-test two experimental vehicles by 1994. Since then, however, the program has encountered numerous problems, including technical difficulties, budget reductions, changes in management structure, and major adjustments to scope and schedule. According to the Administration's most recent estimate, the cost of the program has surpassed \$5 billion. The planned first flight of the NASP has slipped from 1994 to 1997.

Commitment to the NASP has lacked strong consensual support among various government entities involved with the program. DoD, for example, reduced its budget request for the NASP from planned levels for 1994 and beyond. The NASA Advisory Committee on the Future of the U.S. Space Program concluded that although the program was valid for technological reasons, it did not merit "high schedule urgency." The Congress has been divided over the program. Last year, the House Committee on Armed Services approved DoD's request for funding the NASP, but the Senate Committee on Armed Services voted to withhold funds "for reasons of affordability, higher priorities, and concerns about its ability to provide lower cost access to space." The Congress eventually appropriated \$163 million in 1991, but Congressional concerns about the program remain.

This option would cancel further funding for the NASP. Compared with the Administration's plan and the CBO baseline, the option would save \$300 million in 1992 and a total of \$1.7 billion over the next six years.

The NASP is intended to provide the technological base for the nation's long-range plan for space transport for both civilian and military missions. The plane's speed and ability to operate both in space and in the Earth's atmosphere could provide important capabilities for various military missions. Although the Air Force has not approved a military requirement for the NASP, its missions might include delivering payloads into space, attacking enemy targets with weapons (including

nuclear weapons), intercepting high-value targets such as enemy strategic aircraft, and space control and reconnaissance.

DoD could accomplish these missions without the NASP. For example, payloads are now delivered into space by lift programs that include the space shuttle, Titan IV rockets, and, in the future, the Advanced Launch System. Strategic attack missions can be accomplished by the existing strategic triad, and are the subject of extensive modernization programs. The Strategic Defense Initiative (SDI) is planned to meet the need for intercepting strategic attack vehicles and would provide some space control. Intelligence satellites and planes currently provide reconnaissance capability.

The NASP, however, could enhance the performance of some missions. The aircraft's hypersonic capability, combined with its ability to operate from a conventional airfield, promises quicker execution of various military missions. Unlike other delivery vehicles such as rockets, the NASP could be recalled or reassigned during a military operation. The NASP also could provide important spinoff benefits to other programs as a result of advanced technology research in the areas of propulsion, materials, and aeronautics.

050-10 DELAY DEVELOPMENT AND PRODUCTION
OF NEW WEAPONS UNTIL AFTER 1993

Savings from Admin. Request	Annual Savings (In millions of dollars)						Cumulative Six-Year Savings
	1992	1993	1994	1995	1996	1997	
Budget Authority	5,100	8,500	n.a.	n.a.	n.a.	n.a.	n.a.
Outlays	1,400	3,000	n.a.	n.a.	n.a.	n.a.	n.a.

NOTE: The 1992/1993 DoD budget request does not provide sufficient detail to compute annual savings beyond 1993 for this alternative.

The easing of military tensions and the significant changes in the international political and domestic budgetary environments suggest that a more gradual approach to purchasing weapons may be appropriate. Some analysts have proposed that the weapons acquisition process proceed more methodically to ensure that new weapons being developed will meet performance and cost goals even if more time is required to do so. Others have been concerned that projected reductions in the procurement budget will make existing and planned weapon systems less affordable in the future. Delaying by one year the start of all new research and development (R&D) programs, full-scale development programs, or weapons beginning initial or full-rate production could yield near-term savings, improve overall affordability, and provide time to reassess military priorities consistent with changing national security needs.

This option identifies 59 R&D, full-scale development, and production programs (either entering low - or full-rate production) planned by the Department of Defense for 1992 and 1993. Delaying the acquisition process for all of these programs until after 1993 could save as much as \$5.1 billion in 1992 and \$8.5 billion in 1993.

New Research and Development Programs. The Administration's budget for 1992 requests \$40 billion for research and development--an increase of more than \$5 billion over R&D funding for 1991. Beyond 1992, DoD plans further growth in funding for R&D to preserve technological superiority for future military forces. Consistent with this goal, DoD has proposed 43 new R&D programs for 1992. Although the funding request for most programs is modest--exceeding \$10 million in 1992 for only six of the new programs--out-year funding requirements accelerate rapidly for new major weapons programs such as the medium-lift helicopter, the follow-on to the A-6 aircraft, an upgrade to the F/A-18 aircraft, and the Tactical AIM missile. Total funding requested for all new R&D programs exceeds \$750 million in 1992--about 2 percent of the total budget request for research, development, test, and evaluation.

Delaying the funding for all of these new programs until after 1993 could save about \$750 million in 1992 and reduce out-year funding requirements accordingly. A one-year delay, however, could add to the eventual overall cost of these programs, assuming that administrative, labor, and material costs experience real increases in the future. In addition, a delay could extend the time until a weapon could be deployed.

Alternatively, the Congress could choose to authorize a given amount for new R&D programs, say \$250 million, and direct DoD to allocate these funds to the programs with the highest priority. Doing so would save \$500 million in 1992, with a resultant delay in further procurement funding requirements.

Programs Entering Full-Scale Development. DoD authorizes a weapons system to enter full-scale development when a program demonstrates that its operational and acquisition management concepts are sound and that the technology to be used is valid and feasible. Many programs, however, enter full-scale development prematurely, and require costly program adjustments. The risk of incurring delays and added costs can be reduced by developing and testing prototypes of a system or its components during advanced development. Developing and testing prototypes, on the other hand, increases the time needed to complete advanced development.

The Administration's budget contains a request for funding the full-scale development of three major weapons programs in 1992 and 1993: the Air Force's Advanced Tactical Fighter aircraft and Space Based Radar, and the Army's Armored Systems Modernization program. Approximately \$1.2 billion could be saved in 1992 and \$1.9 billion in 1993 by extending advanced development and delaying full-scale development until after 1993. Delaying full-scale development could, however, add to the long-run cost of these programs.

New Production Programs. Funding for defense production programs has decreased in real terms each year since 1985. The Administration's budget request for procurement in 1992 is about 5 percent below the appropriated level in 1991 in real terms. Although DoD projects a modest real increase to the procurement budget in 1993, recent history suggests that future real growth in the procurement budget during the next few years is uncertain. To the extent that future procurement budgets do not meet DoD's projections, production programs will become less affordable. As a result, production of weapons may have to be cut back or canceled to accommodate unanticipated budgetary constraints. As a reflection of the reduced threat and increased budgetary constraints, DoD canceled 81 weapons programs in this year's biennial budget request, including major systems such as the Bradley fighting vehicle, the Trident submarine, the F-16 aircraft, and the Peacekeeper intercontinental ballistic missile. In addition, DoD is purchasing other weapons, such as the F/A-18 aircraft, at reduced production rates to save money.

The Administration's budgets for 1992 and 1993 contain funding leading to initial or full-rate production for 13 weapons programs. Delaying production while providing requested research funds would save \$3.1 billion in 1992 and \$6.6 billion in 1993.

050-11 REDUCE SPENDING ON INTELLIGENCE PERSONNEL

Savings from Admin. Request and CBO Baseline	Annual Savings (In millions of dollars)						Cumulative Six-Year Savings
	1992	1993	1994	1995	1996	1997	
Budget Authority	300	900	1,500	2,200	2,900	3,300	11,100
Outlays	285	870	1,470	2,165	2,865	3,280	10,935

U.S. intelligence activities are conducted by a variety of organizations including the National Security Agency, the Central Intelligence Agency, the Defense Intelligence Agency, the Defense Mapping Agency, the National Reconnaissance Office, the specialized intelligence agencies of the individual military services and commands, and elements of the Departments of State, Justice, Treasury, and Energy. These agencies monitor arms control agreements and, more generally, assess the military and economic capabilities of the Soviet Union and other countries. They survey the military activities of various countries, resistance armies, terrorist organizations, and drug groups to detect early signs of operations that could be harmful to the United States or its allies, and carry out certain covert operations. In the event of conflict, they also provide information of critical importance for choosing and carrying out U.S. or allied armed operations.

Although much of the requested funding for these activities is classified, statements in the press and at open intelligence hearings suggest that current funding is about \$30 billion per year. In estimating savings, CBO assumed that the Administration intends to keep funding at current real levels indefinitely.

This option would reduce the number of intelligence personnel by 25 percent by 1996, in accordance with the mandate of conferees from the Armed Services Committees expressed in the National Defense Authorization Act for Fiscal Year 1991. That act stipulated that intelligence staffing be reduced by at least 5 percent annually relative to the 1990 level from 1992 through 1996. Assuming that the ratio of personnel expenditures to the total budget for intelligence activities is about equal to the DoD-wide average, and assuming that press reports on the magnitude of spending are accurate, savings relative to 1991 budget levels would reach about \$3 billion per year by the end of 1997. Savings relative to the Administration's plan might be somewhat lower than indicated in the table because modest cutbacks may already appear in the President's request. Thus, the above estimates probably should be viewed as upper bounds on actual savings.

Changes in U.S. intelligence operations should be made with a good deal of caution. Unless properly implemented, such changes could damage highly valuable intelligence-gathering activities. Moreover, in a period of increased trust and disarmament between the superpowers, enhanced intelligence capabilities may provide a prudent and economical form of insurance against a resurgent Soviet Union. If there is a choice between having too little and too much, according to this line of reasoning, one should have too much. As recent world events have shown, moreover,

intelligence activities must focus on developments in many countries besides the Soviet Union. Consequently, reductions in intelligence funding, though they may be feasible, should be attempted only when waste or inefficiency is clearly identified.

In the view of some critics, however, there may be a good deal of redundancy in the operations of the roughly 20 intelligence organizations. Given the complexities and uncertainties intrinsic to intelligence work, there undoubtedly are benefits to having more than one independent group study any given issue. However, the benefits of such overlap clearly must diminish at some point, and many members of Congress apparently have determined that that point has been reached.

Moreover, there may be an excess not only of personnel, but also of technical systems used in reconnaissance. In that case, cuts could be applied to the entire intelligence budget as well as personnel, which would result in greater savings than those proposed in this option. For example, imaging satellites of the so-called KH and Lacrosse varieties are currently deployed in greater numbers than in the past, and are expected to receive continued high funding in the future. These satellites may, however, produce so much data that they overwhelm systems for collection and analysis. In addition, to the extent that they are intended to find and track Soviet mobile intercontinental ballistic missiles, they might even hinder deterrence and the prospects for arms control by making the Soviet Union less comfortable about the survivability of its forces--whether or not the satellites have all the capabilities that worst-case Soviet planners might attribute to them. Reducing all intelligence spending by 25 percent would save at least \$5 billion annually, assuming that press reports of total intelligence spending are accurate.

050-12 POSTPONE RESUMPTION OF DoE PRODUCTION
OF TRITIUM AND SHARPLY REDUCE PRODUCTION
AND TESTING OF WARHEADS

Savings from Admin. Request and CBO Baseline	Annual Savings (In millions of dollars)						Cumulative Six-Year Savings
	1992	1993	1994	1995	1996	1997	
Budget Authority	500	1,500	2,500	3,000	3,000	3,000	13,500
Outlays	500	1,000	2,000	2,500	3,000	3,000	12,000

The Department of Energy (DOE) manufactures the materials for nuclear weapons and disposes of nuclear waste; it also designs, tests, manufactures, and maintains the weapons themselves, and is responsible for the safety of its production and manufacturing sites. The Administration is requesting \$11.8 billion for 1992 and \$12.2 billion for 1993 for Atomic Energy Defense Activities. Of these total amounts, \$6.7 billion and \$6.8 billion would be allocated for "defense programs" in 1992 and 1993, respectively, \$3.7 billion and \$4.1 billion for environmental restoration and waste management, \$0.5 billion each year for new production reactors, and \$0.8 billion each year for naval reactors.

This option would reduce by one-third the funding for defense programs--the design, testing, production, and maintenance of weapons--and would postpone funding for construction of a new production reactor until the next century. (The one-third cut should be viewed as an illustrative assumption for purposes of estimating savings.) Savings would be roughly \$3.0 billion annually by 1997.

This option would take advantage of the progress in U.S.-Soviet relations, as well as the unilateral reductions in tactical nuclear weapons made by the U.S. military in recent years, to allow the canceling of most warhead programs. For example, the W80 warhead for the nuclear version of the sea-launched cruise missile might be canceled and no further nuclear SLCM's deployed. Further savings could be realized by canceling other programs, such as SRAM-T (a modified version of the strategic Short-Range Attack Missile II that is now entering production). In addition, it might be reasonable to produce only a small number of W88 warheads for the "Trident II" D5 missile; remaining D5 missiles could be outfitted with old Poseidon warheads, thereby posing less of a threat to hardened Soviet sites but remaining very capable against other targets.

Maintenance of warheads could continue under this option, as could research and development for the next generation of production reactors. Production of some warheads could continue as well; for example, this option would permit production of the warhead for the Advanced Cruise Missile. Tritium for these new warheads, and for older ones in need of replenishment, could be obtained from retired weapons. (Even older warheads contain much tritium that has not decayed and can be reclaimed. In principle, the need to produce tritium can be deferred by about 12 years if the total inventory of nuclear warheads is reduced by 50 percent.) Finally,

this option would allow the Department of Energy to continue its cleanup operations and fueling of naval vessels.

Reducing the U.S. nuclear arsenal may be unrealistic, or at least premature, during a period of ongoing Soviet nuclear modernization. Depending on how it is implemented, this option might also preclude replacing some existing warheads with new types explicitly designed to be safer and more reliable. Finally, it could prevent development of next-generation warheads with the ability to penetrate the ground before detonating, to radiate microwaves into a large area in an effort to destroy Soviet mobile missiles, or to attack in other novel ways. If these missions are deemed important, it may be necessary to retain DOE funding at or near requested levels.

By slowing the development of next-generation warheads, however, this option might be a desirable means of slowing the nuclear arms competition and preserving stability in the nuclear balance. Moreover, the curb on nuclear testing and the reduction in warheads implied by this option--which could be formalized bilaterally or multilaterally--would put the United States in better compliance with the 1970 Nuclear Non-Proliferation Treaty. The treaty, which calls for an early end to the nuclear arms competition and to nuclear testing, is due to expire in 1995 unless renewed or rewritten. Yet many countries are unhappy with current compliance of the superpowers and may not readily agree to renew it in 1995 unless the situation changes. Although some potential proliferators undoubtedly criticize the superpowers' nuclear programs simply to divert attention from their own programs--programs they have no intention of stopping, regardless of the superpowers' nuclear policy--the United States' ability to mobilize international pressure against such proliferators may nevertheless depend on the degree to which it is seen as abiding by its own treaty obligations. Given concern over nuclear proliferation, which played a large part in the decision to go to war against Iraq, the U.S. interest in preserving the treaty may be great enough to accept certain sacrifices in future U.S. weapons development--especially since the safety and reliability of weapons generally can be tested and in some cases improved without actual nuclear detonations.

050-13 ACCELERATE SEPARATION OF ENLISTED CAREER PERSONNEL

Savings from Admin. Request	Annual Savings (In millions of dollars)						Cumulative Six-Year Savings
	1992	1993	1994	1995	1996	1997	
Savings in Total Federal Budget							
Budget Authority	-230	-50	490	820	560	440	2,030
Outlays	-250	-150	300	620	410	300	1,230
Savings in Defense Budget							
Budget Authority	-220	-20	520	860	600	480	2,220
Outlays	-210	-30	500	840	610	480	2,190

NOTE: Savings in the federal and Department of Defense budgets differ because of the effects of accrual accounting for military retirement and of other pay costs that are offset in the federal budget.

The planned reduction in military personnel through 1995 creates a conflict between reducing costs and preserving the career expectations of current personnel. Reaching the objective of a smaller force with a balanced seniority distribution--that is, a distribution of personnel by year of service that is sustainable given long-term retention patterns--could eventually require the separation of many career enlisted personnel. However, the Uniform Strength Reduction Process, developed by the Senate Committee on Armed Services and adopted in the main by House and Senate conferees for the 1991 Defense Authorization Act, instructs the Department of Defense to defer separations of midcareer personnel until other sources of personnel reductions have been exhausted.

The conferees' plan, intended to spare career personnel as much as possible, does not reduce the number of career personnel who eventually will have to be separated to maintain a balanced seniority distribution. Instead, it merely delays the cost savings that will result from the separations. Medium- and long-term savings from the reduction will vary significantly depending on when the separations take place and on the extent to which imbalances are tolerated.

Under this option, the services would be required to project the numbers of personnel in each year of service who would eventually have to be separated to bring the enlisted forces in line with sustainable year-of-service profiles by the end of 1995. These separations would begin immediately, in concert with reductions in accession levels (the numbers of new recruits brought in), exempting only personnel eligible to retire within five years. Neither accessions nor the numbers of personnel in any three successive years of service would be permitted to fall below sustaining levels. (An exception to this last requirement would be permitted in the last year of the reduction, when the effect of exempting personnel nearing retirement would be felt.)

Savings under this option would depend on how each service would make the reductions in the absence of these requirements. The Air Force apparently intends

to rely almost entirely on reduced accessions--more than 25 percent below sustaining levels--and some limitations on first reenlistments. Compared with such a strategy, this option would increase the savings in Air Force budget authority by about \$1.3 billion over the 1992-1996 period. Army plans call for accessions modestly below sustaining levels, but early separations of career personnel would occur only through the existing Qualitative Management Program and the routine separation of junior noncommissioned officers who fail to be promoted to the next pay grade. The more aggressive strategy for the Army implicit in this option would save an additional \$180 million. Navy savings might be increased by about \$240 million under this option. (The savings given are relative to the Administration's plan; savings relative to the CBO baseline are not relevant because the baseline implicitly assumes no reduction in personnel levels.)

In addition to its effect on costs, a strategy of accelerated separations might improve Army morale by reducing the uncertainty about future separations. Personnel targeted for eventual separation could be identified, and informed, early in the process, thus allowing other personnel to be reasonably confident that they would be able to complete a military career. Air Force morale, in contrast, would probably worsen because that service currently plans to avoid involuntary separations of career personnel.

Accelerating separations would have some other drawbacks. Six-year savings would be substantial, but military personnel costs would be higher in the early years of the reduction than under the Administration's request because of separation costs. Separation costs are much greater for more senior personnel than for junior personnel because severance payments rise rapidly with years of service. Accelerating separations could also hinder the services' reductions in force structure, as experienced personnel who could play key roles in the deactivation of unneeded units would be lost. In addition, personnel turnover could reduce readiness throughout the affected services because the personnel selected for separation would not simply be those assigned to units being deactivated. Early targeting of individuals for separation, however, could mitigate the disruption by allowing the services to schedule separations to coincide with the individuals' planned rotations to new units.

050-14 INCREASE CHARGES FOR DIRECT
MILITARY HEALTH CARE SERVICES

Savings from Admin. Request and CBO Baseline	Annual Savings (In millions of dollars)						Cumulative Six-Year Savings
	1992	1993	1994	1995	1996	1997	
Budget Authority	220	220	220	220	220	220	1,320
Outlays	175	210	215	220	220	220	1,260

When nonactive-duty beneficiaries receive care in military hospitals and clinics, they pay very little. Hospital stays cost \$8.55 or less a day; outpatient visits and prescriptions cost nothing. Such low charges promote greater use of health care services, thus contributing to overcrowding and rising costs.

Higher charges for military health care benefits would both curb excessive use and raise revenue. This option would charge varying amounts for outpatient care in military clinics in the United States: outpatients from senior enlisted persons' families (above pay grade E-4) would pay \$5 for a visit to a military physician, and outpatients from officers' families would pay \$10. Prescriptions filled in military pharmacies would cost \$3. Dependents of enlisted personnel below pay grade E-5 and survivors of military personnel—the military's least well-off beneficiaries—would still pay nothing for visits to military physicians or for prescription drugs. To avert a shift of patients to inpatient care, this option would also raise the daily charge for a hospital stay to \$25 for all nonactive-duty beneficiaries. Together, these changes could save the Department of Defense about \$220 million a year. Some of these savings would be offset by the cost of modifying existing automated information systems to collect the higher fees. (Savings relative to the Administration's budget request and the CBO baseline are equal because of similar assumptions about use of direct military health care services.)

Because medical care is a key part of military compensation, military families would view increased charges as an erosion of benefits. Recruitment and especially retention could suffer, although the parallel trend in civilian medicine to wider cost-sharing might allay beneficiaries' dissatisfaction. Indeed, increased cost-sharing would bring the military health care system somewhat more in line with medical plans offered to civilian employees of the federal government. Nor should rising charges necessarily harm health, a potential concern, because evidence shows that people at ages and incomes typical of military beneficiaries seek needed care even when they share the costs.

050-15 CHARGE RETIRED MILITARY PERSONNEL PREMIUMS
FOR MILITARY HEALTH CARE

Savings from Admin. Request and CBO Baseline	Annual Savings (In millions of dollars)						Cumulative Six-year Savings
	1992	1993	1994	1995	1996	1997	
Budget Authority	450	475	505	535	565	600	3,130
Outlays	355	450	490	525	555	585	2,960

When military personnel retire from active-duty service, they and their dependents remain eligible to use the military's health care system. They may visit physicians in military clinics, and have any prescriptions filled, for free. As inpatients in military hospitals, retired enlisted personnel pay nothing, retired officers pay about \$4 a day, and dependents pay \$8.55 a day. When this direct military care is not available (or inaccessible because of distance), the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) will help retirees and their dependents who are less than 65 years old pay for civilian services. (Medicare helps those 65 years of age and older.) After beneficiaries pay a deductible of \$150 a person or \$300 a family (as of April 1, 1991), CHAMPUS covers at least 75 percent of allowable expenses, with a relatively high limit on out-of-pocket expenses of \$10,000.

Retirees do not pay premiums for these benefits. Some of them, however, feel it necessary to pay premiums for private insurance policies that supplement CHAMPUS. Although such policies offer needed protection against catastrophic expenses, they also insulate beneficiaries from CHAMPUS's requirements for cost-sharing, and thus undermine CHAMPUS's main instrument for controlling use.

This option would charge retirees and their dependents under age 65 a monthly premium of \$85 a family. Only nondisabled retirees would have to pay. As under the Federal Employees Health Benefits (FEHB) program, they would have an open season in which to enroll in the military health care system. In return for paying the premium--and as an inducement for beneficiaries to drop any supplemental insurance--the annual limit on out-of-pocket expenses would be reduced from \$10,000 to \$2,500, a level typical of the FEHB. Both premiums and the level of catastrophic protection would be updated annually to reflect the effects of medical inflation.

How many retirees would choose to enroll? The estimated savings shown in the table above assume an enrollment rate of 60 percent. Based on survey data, a plausible guess might range between 40 percent and 80 percent: the lower figure represents the proportion of retired families who get all or most of their outpatient care directly at military health care facilities; an additional 40 percent get outpatient care from both military and civilian providers, but prefer the civilian system. (The rest never use military treatment facilities.) If 60 percent of retired families were to enroll, net revenue from the premiums and enhanced catastrophic protection would total more than \$3.1 billion over the next six years. Savings are the same compared with either the Administration's budget request or the CBO baseline because both

make similar assumptions about the number of future military retirees. (Though not reflected in this estimate, further savings would result from an expected decrease in use of CHAMPUS.)

In addition to raising revenue, this option would give military health care planners a firm handle on the nature and composition of retirees' demand for health care. At present, the number and location of retirees interested in using the military's health care system is uncertain, and can therefore vary from year to year. Once planners have that information, the process of allocating resources should become significantly easier, and potentially more cost-effective.

Charging a premium would create a risk of empty waiting rooms and idle active-duty physicians if too few retirees enrolled in the military health care system. More likely, many retirees would resent premiums as an erosion of the military health care benefit. Although \$85 represents only about 7 percent of the average nondisabled retiree's monthly pension, and a smaller percentage of total family income, many would view the added cost-sharing as a breach of faith. Some families, however, no longer would feel it necessary to pay for supplemental insurance, and could therefore offset part of the premium.

Even modest premiums may be burdensome for lower-income retirees. Those families might suffer real financial hardship paying \$85 a month, or might forgo military health care. The Department of Defense could, however, link premiums to income by reducing the premium for the lower ranks and raising it for the higher.

250-1 CANCEL THE NASA INTERNATIONAL SPACE STATION PROGRAM

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Budget Authority	2,000	2,050	2,150	2,200	2,300	10,650
Outlays	1,850	1,900	2,100	2,150	2,250	10,250

In March 1991, the National Aeronautics and Space Administration (NASA) reported to the Congress its plan for a restructured space station program. The plan is the latest in a series for this program that through 1991 will have spent over \$4 billion. The current plan reduces the size of the laboratory and habitation modules and the truss on which they are to be mounted. It also delays by several years achievement of sustained manned operations. By some estimates these changes will reduce the total cost of the program--inclusive of development, transportation, operations, and ground facilities--from \$38 billion to \$30 billion during the 1990s.

Under current policy established in the fiscal year 1991 Appropriations Conference Report, spending on the space station program is restricted to 10 percent growth annually from the 1991 base of \$1.9 billion, until an absolute cap of \$2.6 billion in annual funding is reached. Thus, the maximum spending authority for the program for the 1992-1996 period is \$14.2 billion, if 10 percent growth is granted annually. Canceling the program without initiating an alternative could save as much as \$10.7 billion in budget authority in the 1992-1996 period, relative to the CBO baseline, which is restricted to about a 4.5 percent growth path.

An alternative to cancellation would be to proceed with a more modest program, using shuttle spacelab flights and intermittently manned and unmanned facilities, rather than a permanently manned facility. These activities could be accommodated within or below the current CBO baseline. Restricted manned space activity of this type could provide a foundation in the 1990s for a more modest overall NASA program, which would not require increases in the agency's funding level above the CBO baseline from 1992 through 1996.

Advocates of canceling the space station point out that many of the traditional objectives of U.S. space policy will not be served by the current program. No significant national security purpose will be served, as the Department of Defense has expressed very limited interest in using the NASA station. Many civilian scientific goals could be met earlier, and at a lower cost, with a more modest program. Some scientists argue that the space station will absorb funds that would be better spent on space science and exploration, for which the known returns are greater.

The arguments for the current space station program emphasize its possibilities, both known and unknown, and U.S. commitments to cooperating countries. Manned exploration of the solar system requires the type of long-duration flight provided by the current program. More modest alternatives do not. The prospects for materials research and, ultimately, manufacturing may be sufficient to justify continuing the program at some level. Advocates further contend that other significant uses for a space station will be discovered after it is operational. If the United States were to cancel the current program, it would renege on agreements recently signed with European nations, Japan, and Canada. If the United States were to withdraw from these agreements, its partners could choose to continue a space station effort of their own or to increase cooperation with the Soviet Union.

250-2 POSTPONE NEW SPACECRAFT DEVELOPMENT PROJECTS IN ONE OF THE MAJOR NASA PROGRAMS FOR SPACE SCIENCE AND APPLICATIONS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Budget Authority	150	160	160	170	180	820
Outlays	80	150	160	170	170	730

The National Aeronautics and Space Administration's (NASA's) space science and applications program is currently funded at \$2.4 billion for eight programs. Three programs--physics and astronomy, planetary exploration, and environmental observation--accounted for 85 percent of 1991 funding. Each of these three programs includes development funding to plan and build new spacecraft, and operations funding to support the flights of existing spacecraft and analyze their data. Postponing new activities in only one of the three programs could save \$820 million in budget authority and \$730 million in resulting outlays over the 1992-1996 period, relative to the CBO baseline. Savings could be substantially greater--over \$3 billion in budget authority--relative to the President's request. To realize these savings, NASA would have to cancel or postpone either the Advanced X-ray Astrophysics Facility in the physics and astronomy program, the Comet Rendezvous Asteroid Flyby/Cassini mission in the planetary exploration program, or the Earth Observation System in the environmental observation program.

Postponing major new spacecraft development in any of these programs would not prevent scientific work from continuing. In fact, it may better serve the public purpose of gaining scientific knowledge by allowing intensified efforts in the programs in which new spacecraft development continues. In the physics and astronomy program, existing ground facilities and two orbiting observatories--the Hubble Space Telescope and the Gamma Ray Observatory--will provide the scientific community with new data, even if two additional planned orbiting observatories (the Advanced X-Ray Astrophysics Facility and the Space Infrared Telescope Facility) are postponed. In the planetary exploration program, although obtaining samples from other bodies orbiting the sun would require new missions, data from completed missions and those likely to be operating in the near future will be available to planetary scientists. In the environmental observation program, multiple sources of new data will be available regardless of whether new spacecraft are developed and launched over the next five years.

Significant reductions in one space science program, rather than smaller reductions across all programs, would concentrate resources in the programs not cut. This reduction strategy would avoid extending projects with no near-term results.

Aggressively pursuing international cooperation in the program chosen for cutbacks could also decrease scientific losses.

The effects of postponing new spacecraft development in a major program would occur both immediately and in the long term. Immediately, U.S. prestige would fall--and the prestige of other countries would rise--in the area in which new development projects were postponed. In the long term, cutbacks might also discourage the entry of new scientific and engineering talent into the areas in which cuts were made, leaving the United States permanently behind.

**CANCEL NASA RESEARCH AND TECHNOLOGY PROGRAMS
FOR THE SPACE EXPLORATION INITIATIVE**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Budget Authority	160	160	170	170	180	840
Outlays	80	150	160	170	180	740

The National Aeronautics and Space Administration (NASA) proposes to expand its research and technology development program, for the ultimate purposes of establishing a U.S. base on the Moon and carrying out a manned mission to Mars. The Administration's 1992 budget request also includes funding for this general purpose in the Department of Defense and Department of Energy. Not expanding the nation's space program in this direction could save the three agencies \$840 million in budget authority and \$740 million in resulting outlays over five years, relative to the CBO baseline.

Human exploration of the solar system is a long-standing goal of space enthusiasts and, implicitly, of the NASA program. Since the earliest days of the U.S. space program, its supporters have foreseen progress toward manned spaceflight from Earth's orbit to the Moon and interplanetary space travel to Mars. Presidential commissions in 1970 and 1986 refined the basic goal and recommended that the nation proceed with these objectives. In 1989, President Bush adopted a policy of carrying out manned space flights over the next 30 years--by returning to the Moon around the year 2000, and by carrying out a manned mission to Mars sometime after 2010. However, a 1990 policy review by the Advisory Committee on the Future of the U.S. Space Program recommended modifying this goal to one of developing technologies that would contribute to expanded exploration, but establishing programs only as funds became available.

Nevertheless, the main disadvantage of proceeding with a program for manned spaceflight beyond Earth's orbit is the cost. Preliminary estimates from NASA indicate that the entire Moon/Mars initiative could cost as much as \$400 billion. Even if radical and less expensive options were available--such proposals abound in the space policy community--the justification for significant expenditures at any level rests upon returning U.S. citizens to the Moon or visiting Mars for the first time, benefits that are both controversial and difficult to quantify.

Many of the subsidiary benefits of the Moon/Mars initiative could be more certainly and less expensively realized by pursuing alternative federal science programs. The space science program itself could pursue alternative projects that are far less costly yet as productive. In a broader context, equivalent federal spending on

a variety of science and technology areas would have many of the same beneficial effects on technology, education, and the competitive strength of U.S. industry, as does manned exploration of the solar system. In the presence of technical uncertainty, the expected return from a more diversified national science portfolio would arguably be even greater than that expected for a program with a narrower focus.

Successful exploration of the solar system, however, could offer some unique benefits. Such an enterprise would offer the American people a tangible symbol of national achievement. An aggressive program for manned spaceflight may be particularly effective in attracting young people to careers in science and technology. Finally, the technical capability of the United States may be uniquely suited to human exploration of the solar system; thus, pursuing this objective has an advantage over other science and technology options.

270-1 **REDUCE SUBSIDIES PROVIDED BY THE RURAL
ELECTRIFICATION ADMINISTRATION**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Lower 1991 REA Lending Levels by 25 Percent						
Budget Authority	46	47	47	48	49	237
Outlays	6	16	28	38	45	133
Raise Interest Rate to the Treasury Cost of Borrowing						
Budget Authority	186	187	189	193	201	956
Outlays	23	66	112	151	181	533

The Rural Electrification Administration (REA), an agency within the Department of Agriculture, provides financial assistance to rural electric and telephone cooperatives. In 1973, the Congress set up the Rural Electrification and Telephone Revolving Fund (RETRF) to provide direct loans to rural utility cooperatives, at an interest rate of 5 percent, and to authorize the REA to guarantee loans made to cooperatives by other lenders. In 1990, the REA provided \$860 million in direct loans and \$72 million in new loan guarantees. When the RETRF was created, the 5 percent rate on REA direct loans was about one percentage point below the long-term Treasury borrowing rate. Since then, the gap has widened between the 5 percent rate paid by the cooperatives and the interest rate paid by the REA to finance the direct loans. Although this interest rate differential has decreased since its widest margin of ten percentage points in 1984, the gap still remains at about three percentage points today.

The federal government incurs large budgetary costs from REA lending activities as a result of the interest rate subsidy REA borrowers have been provided over the years and because of a few large loan defaults. To achieve budgetary savings, one option would lower the levels of REA lending set by the Congress, and a second option would raise the interest rate on REA direct loans, eliminating the interest rate subsidy.

Lower 1991 REA Lending Levels by 25 Percent. Lowering REA lending levels, particularly for direct loans, would result in federal budgetary savings. If the Congress reduced new REA direct loans to 75 percent of the 1991 loan level of \$672 million, REA outlays would fall by \$6 million in 1992 and by \$133 million over the 1992-1996 period. A 25 percent cut in loan levels would represent a cut of nearly 50 percent from pre-1991 loan levels. An 25 percent cut in REA loans was included in the Omnibus Budget Reconciliation Act of 1990. If the REA targeted its direct loans

toward cooperatives most in need of federal financial assistance, the effect of further reducing REA's lending levels might be more equitable.

Raise Interest Rate and Treasury Cost of Borrowing. Alternatively, the Congress could eliminate the interest rate subsidy on REA direct loans by raising the rate to the Treasury cost of borrowing for debt of comparable maturity. As long as loan levels are not increased dramatically (to a point at which defaults might become likely), this option would save about \$23 million in 1992 and \$533 million over the 1992-1996 period.

The REA has largely fulfilled its original goal of making electric and telephone service available in rural communities. Many cooperatives, however, still depend on the low-interest REA loans to expand and maintain viable electric services to rural communities. Increasing the interest charges or reducing the amount of REA loans provided to these cooperatives would raise the utility bills of their customers, affecting in particular the more rural, less densely populated regions. Raising the REA interest rate would have a small effect on the rates of most cooperatives, however, as interest charges account for only a small percentage of the average ratepayer's bill. Alternatively, reducing the level of REA direct loans could decrease federal subsidies to financially sound cooperatives that are capable of obtaining private financing, but would still provide federal financing to the more unsound cooperatives that would have to pay significantly higher rates for privately financed loans.

**REFORM DEBT REPAYMENT POLICY FOR POWER
MARKETING ADMINISTRATIONS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Budget Authority	0	160	185	145	170	660
Outlays	0	395	395	405	420	1,615

Federal power marketing administrations (PMAs) include the Alaska Power Administration, the Bonneville Power Administration, the Southeastern Power Administration, the Southwestern Power Administration, and the Western Area Power Administration. These PMAs sell electricity to certain industrial users, publicly owned utilities, and government installations at wholesale rates from hydroelectric generating plants owned and operated by the federal government. Capital investments for these hydroelectric power and irrigation facilities are financed by federally appropriated funds, which must be repaid at interest rates ranging from 0 percent to 16 percent, averaging about 3 percent. The outstanding debt obligations of these PMAs to the federal government totaled about \$14 billion at the end of fiscal year 1990.

By law, the PMAs must use income from electricity sales to cover all operating costs and must repay all federal investments within a "reasonable period," nominally 50 years, though not at a set rate or on a fixed timetable. Department of Energy policies currently allow the PMAs to determine their own schedules for repaying the principal portion of their outstanding debt. In some cases, the principal payments on the federal loans are being deferred until the end of the asset lives of the capital investments. Since the Treasury is not receiving any regular repayments on the loan principal, only interest costs, the amount of deferred loan repayments increases the federal budget deficit.

The President's 1992 budget proposes that the PMAs use a mortgage-type repayment schedule to repay their appropriated debt, in addition interest rates would be increased to equal the Treasury interest rate at the time each project went into service.

Requiring the PMAs to repay all federal appropriations on fixed repayment schedules over the lifetime of these projects would increase Treasury revenues and thus lower federal outlays by about \$1.6 billion over the 1992-1996 period. The resulting increase in principal repayments could increase electricity rates for wholesale customers in certain service areas. CBO estimates it would take the PMAs about 12 months to implement the electricity rate increases that would be required under the President's proposal, thus additional budget receipts would start in 1993.

Although the PMAs have strengthened regional industrial bases by providing electricity, the prices they charge for electricity may not fully reflect the actual cost of delivery. A disadvantage of the below-market rates and unregulated repayment schedules is that they may represent an inequitable subsidy to certain regions. This cost is borne by all taxpayers. Requiring the PMAs to repay their federal debt obligations on fixed repayment schedules might not disrupt local economic activity, because electricity prices in areas served by the power agencies would still remain below the national average. Enforcing a strict schedule for repaying debt, however, might translate into higher product prices and lower market shares for some industries, such as the aluminum industry in the Pacific Northwest.

350-1 **REDUCE DEFICIENCY PAYMENTS TO FARMERS
PARTICIPATING IN USDA COMMODITY PROGRAMS
BY LOWERING TARGET PRICES**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Budget Authority	330	1,180	2,040	2,970	3,860	10,390
Outlays	330	1,180	2,040	2,970	3,860	10,390

Target prices are used to calculate deficiency payments, which are the primary form of direct government payments to farmers. The table on the next page shows the target price levels set by current law through the 1995 crops. The CBO baseline assumes that target prices are maintained at these levels for the 1996 crop year.

Budget savings could be achieved by reducing target prices in the years after 1991. The greater the rate of reduction, the greater would be the savings. One alternative, shown in the table, would be to reduce target prices by 3 percent per year starting with the 1991 crops. Outlay savings are estimated to be \$10.4 billion over the 1992-1996 period.

An advantage of a continued decline in target prices is that it would increase the degree to which farmers respond to market prices, rather than to government program benefits, in making their production decisions. Further target price reductions would be viewed by U.S. competitors and trading partners as evidence of an intention to reduce the effects of domestic farm policies on world trade in agricultural commodities. Reductions could have a positive benefit in the ongoing trade negotiations under the auspices of the General Agreement on Tariffs and Trade.

Lower target prices would reduce farm income by reducing direct government payments. Farm income would not fall as much as government outlays because some farmers would choose not to participate in the commodity programs. Although these farmers would give up all of their government payments, they would not be required to idle part of their acreage and thus would generate income from additional production. In addition, livestock producers might benefit from lower feed costs.

Despite an improved outlook for agricultural markets, many farmers are still facing financial difficulties. In some cases, financial problems were worsened by droughts in recent years. Further reductions in target prices would exacerbate these difficulties. Providing financial assistance directly to needy farmers might, however, be more appropriate and would certainly be more cost effective.

TABLE. TARGET PRICES UNDER CBO BASELINE ASSUMPTIONS AND UNDER 3 PERCENT ANNUAL REDUCTIONS (By crop year)

	1991	1992	1993	1994	1995	1996
CBO Baseline Assumptions						
Wheat	4.00	4.00	4.00	4.00	4.00	4.00
Corn	2.75	2.75	2.75	2.75	2.75	2.75
Rice	10.71	10.71	10.71	10.71	10.71	10.71
Cotton	0.729	0.729	0.729	0.729	0.729	0.729
3 Percent Annual Reductions						
Wheat	4.00	3.88	3.76	3.65	3.54	3.43
Corn	2.75	2.67	2.59	2.51	2.43	2.36
Rice	10.71	10.39	10.08	9.77	9.48	9.20
Cotton	0.729	0.707	0.686	0.665	0.645	0.626

SOURCE: Congressional Budget Office.

NOTE: Wheat and corn in dollars per bushel; rice in dollars per hundredweight; cotton in dollars per pound.

**350-2 REPLACE DEFICIENCY PAYMENTS IN THE WHEAT,
FEED GRAINS, COTTON, AND RICE PROGRAMS WITH
DECLINING DIRECT PAYMENTS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Budget Authority	110	270	260	240	230	1,110
Outlays	110	270	260	240	230	1,110

In recent years, a number of proposals have been offered that would "decouple" or separate farm support payments from the volume of crop production. The ultimate goal of decoupling is to reduce government influence on production decisions and to increase the responsiveness of farmers to market signals. Current farm programs incorporate some aspects of decoupling.

One way of decoupling income support from production decisions would be to make direct payments to producers based on their production histories. In such a program, payments would be made to participants irrespective of current market prices. Anyone now participating in the commodity programs could opt to participate in the new direct farm income support program. The actual payment rate would be expressed per unit of historical output and could be set at any level. The rates assumed in this option were chosen so that total annual payments are 4 percent less than annual direct payments projected in the CBO baseline from crop years 1992 to 1996. This assumption, of course, assures savings relative to the current baseline. Price supports, as currently provided by the Commodity Credit Corporation's nonrecourse loans, would no longer exist in a decoupled program. (A low-cost recourse loan might be considered to facilitate farmers' marketing decisions.) Likewise, acreage controls other than the Conservation Reserve Program would be phased out. Export programs could be maintained as a bargaining tool for negotiations to liberalize international trade.

The direct farm income support program would have several advantages. This decoupled program would avoid the excess production and inequities across crop types characteristic of the current program. U.S. farm policy would thus move toward conformity with this country's negotiating position in the General Agreement on Tariffs and Trade (GATT). In addition, most studies indicate that a decoupled agricultural policy would produce a relatively small but significant improvement in the overall performance of the U.S. economy. This improvement is considered to be the result of a more efficient use of resources than now takes place in farming. Finally, a decoupled program increases the predictability of agricultural budget costs.

Decoupling would not be without its disadvantages. Many farm groups have voiced hostility to decoupling, which they characterize as farm welfare. Further, a decoupling program like the one discussed in this option would simply lock in the current distribution of benefits, which has been criticized as inequitable. Also, the impact that decoupling would have on agriculture is not clear. While decoupling might make more land available for production as well as increase efficiency and output, it would probably result in a net outflow of resources from agriculture, leading to lower production and higher prices. Most analysts feel that aggregate farm income would fall under a decoupling program and that landowners could experience losses on the value of their property.

**RAISE DOMESTIC COMMODITY PRICES BY INCREASING
UNPAID ACREAGE REDUCTION PROGRAMS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Budget Authority	870	2,140	2,100	1,950	1,830	8,880
Outlays	870	2,140	2,100	1,950	1,830	8,880

Participants in federal price and income support programs for wheat, feed grains, cotton, and rice are required to set aside some portion of the land on which they would normally plant these crops. Acreage reduction requirements are imposed by the U.S. Department of Agriculture (USDA) to restrict supply and thereby reduce farm program costs by limiting excess commodity stocks and by raising market prices for those crops.

For the 1991 crop year, the acreage reduction requirement for wheat is 15 percent of base acreage (base acreage is that normally devoted to each crop); the requirement for corn, sorghum, and barley is 7.5 percent of base acreage; the requirement for cotton and rice is 5 percent. The CBO baseline assumes similar levels of acreage reduction requirements in later years.

Raising the acreage reduction requirement in all these crops by five percentage points in each year, beginning with the 1992 crops, would reduce outlays by \$8.9 billion over the 1992-1996 period. Raising acreage reduction requirements would reduce outlays for several reasons: less production would be eligible for deficiency payments and other program benefits; prices would tend to rise (causing lower deficiency payment rates); and fewer producers would participate in the federal programs.

By raising the unpaid acreage reduction requirement, farmers could get a "fairer" price from the market, thereby reducing their dependence on direct government payments.

A disadvantage of this option is that U.S. commodities would be more expensive and, as a result, less competitive in world markets. In addition, acreage reduction requirements reduce the efficiency of U.S. production, again eroding the nation's international competitiveness. Budget savings from this option could be short-term, at best, because the price increase induced by lower U.S. production could cause other countries to expand output and drive prices back down. In addition, increasing the acreage reduction requirement would adversely affect businesses serving agriculture—both upstream (chemical suppliers, implement dealers) and downstream (grain elevator operators, food manufacturers, livestock owners). Increasing the unpaid diversion would simply shift agricultural program costs from taxpayers to consumers.

**ESTABLISH AN ORIGINATION FEE OF 3 PERCENT FOR
NONRECOURSE LOANS FROM THE COMMODITY CREDIT
CORPORATION**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Budget Authority	130	690	140	100	150	1,220
Outlays	130	690	140	100	150	1,220

Participants in price and income support programs can receive loans using their crops as collateral. A producer may either repay the loan or forfeit the crop to the Commodity Credit Corporation (CCC) as full payment when the loan matures. In the marketing loan programs that apply to cotton, rice, and soybeans, producers also have the option of repaying the loan at the market value of the commodity used as collateral for the loan, if the market value falls short of the principal value of the loan received. Currently, participants are not charged anything for receiving such a loan, except for loans made for soybeans and other oil seeds, for which a 2 percent origination fee is charged. The Congress could consider expanding the use of an origination fee to be charged when farmers take out a loan from the CCC.

Cash repayment of a loan for wheat or feed grain production includes the loan principal and the interest that has accrued. Interest rates on CCC loans are based on the government's cost of borrowing and are lower than would be available for similar types of loans from private sources. No interest is charged when loans are repaid in the marketing loan programs for cotton, rice, and soybeans.

Some of the costs of the commodity program could be recovered by imposing a 3 percent origination fee on participants who take out a CCC loan. This option would increase the current origination fee on soybeans and other oilseeds from 2 percent to 3 percent. Such a relatively small fee would have small effects on market prices, yet would save \$1.2 billion over the 1992-1996 period. Just over half of the savings is from the increased fees; the remainder is from lower participation in loan programs. Savings result from the lower loan outlays for five years, but lower loan repayments are counted for only four years.

A major objective of the nonrecourse loan program is to support the incomes of farmers, and an origination fee would undermine this function of the program. Moreover, the nonrecourse loan program benefits all producers—even those not participating in government programs—because it supports market prices (except in crops with marketing loans). Charging producers who participate in the loan program, and ignoring those who receive indirect benefits, might be considered inequitable.

350-5

**RAISE THE PROPORTION OF EACH FARMER'S BASE
ACREAGE INELIGIBLE FOR DEFICIENCY PAYMENTS FROM
15 PERCENT TO 25 PERCENT**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Budget Authority	380	860	820	730	810	3,600
Outlays	380	860	820	730	810	3,600

Outlays of the Commodity Credit Corporation would be reduced by cutting the number of acres eligible for deficiency payments. Currently, wheat, feed grains, cotton, and rice producers who participate in commodity programs receive a deficiency payment. The size of the deficiency payment is generally equal to the difference between the target price for the commodity and its market price times the program yield assigned to the farm times "payment acres." Payment acres equal 85 percent of the farm's crop acreage base less land idled to comply with the acreage reduction program in effect for that crop during that crop year.

This option would expand the changes made in the Omnibus Budget Reconciliation Act of 1990 by increasing from 15 percent of base acreage to 25 percent of base acreage the amount of land not eligible to receive deficiency payments. Producers would be eligible to plant any program crop or oilseed on this additional unpaid acreage without losing eligibility for future program benefits. These changes were introduced both to reduce program spending and to increase the flexibility that farmers have to make planting decisions in response to the needs of the market rather than the rules of the farm programs.

A disadvantage of this option is that it would cause a loss in farm income both for most participants of current commodity programs and for people now raising crops that do not directly receive federal support. Current program participants shift production away from program crops on land no longer earning subsidies and toward alternative crops. As a result of these changing production patterns, incomes of growers of nonprogram crops would be hurt by the new competition.

350-6 RESTRICT ELIGIBILITY FOR BENEFITS FROM
PRICE SUPPORT PROGRAMS AND REDUCE THE
PAYMENT LIMITATION

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Limit Payments to \$50,000 per Person						
Budget Authority	50	120	120	110	100	500
Outlays	50	120	120	110	100	500
Limit Payments to \$40,000 per Person						
Budget Authority	160	400	400	380	370	1,710
Outlays	160	400	400	380	370	1,710
Disqualify People Whose Adjusted Gross Income Exceeds \$100,000						
Budget Authority	80	200	200	190	180	860
Outlays	80	200	200	190	180	860
Disqualify People Whose Gross Revenue from Commodity Sales Exceeds \$500,000						
Budget Authority	50	140	130	120	110	550
Outlays	50	140	130	120	110	550

Current law governing eligibility for benefits under price support programs for crops limits participants to no more than \$100,000 in deficiency payment benefits from the Commodity Credit Corporation during any crop year. The maximum in deficiency payments that can be received is \$50,000 for an individual, plus \$25,000 as a shareholder in a maximum of two corporate farms (each of which is entitled to a maximum payment of \$50,000). This maximum can be achieved only by those who are actively engaged in the operations of relatively large farms and who have organized their farm businesses to maximize payments.

Government costs could be reduced by allowing each farm operator to receive only the individual payment and to eliminate the two corporate farm payments. This option would reduce spending by an estimated \$500 million during the 1992-1996 period. Outlays could be cut further by reducing the maximum direct payment from \$50,000 to \$40,000, with estimated savings totaling \$1.7 billion over the 1992-1996 period.

Eligibility for payments could also be limited based on income or gross sales. Making ineligible people with adjusted gross income from all sources over \$100,000

would save an estimated \$860 million over the five-year period. Making ineligible people with gross revenues from commodity sales over \$500,000 would save an estimated \$550 million over the period.

Support for these changes could be based on the belief that current payment limits are too high. If reductions in program spending are required, they should come from relatively large farming operations rather than relatively small ones. In addition, reducing the limit on direct government payments would reduce their influence on the production decisions of operators of large farms, causing them to be more responsive to market returns. Operators of smaller farms, who are more likely to need government assistance, would continue to receive program benefits as before.

This change could harm relatively efficient-sized farm operations. In addition, until operating and price subsidies are reduced for producers in foreign countries, increasing the exposure of the most efficient U.S. farmers to market forces could hurt long-term prospects for the farm sector.

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Budget Authority	550	380	310	330	330	1,890
Outlays	550	380	310	330	330	1,890

The U.S. Department of Agriculture (USDA) subsidizes the export of agricultural commodities through the Export Enhancement Program (EEP). U.S. exporters participating in EEP negotiate directly with buyers in a targeted country, then submit bids to the USDA for bonuses. The bids include the sale price, tentatively agreed to with the buyer, and the amount of the subsidy or bonus requested by the exporter. If the bids are accepted, the exporters receive their bonuses in the form of generic commodity certificates that can be used by the exporters to acquire government-owned commodities.

Since its inception, over \$3.4 billion of EEP bonus payments have been made, mostly to assist wheat exports. The CBO baseline assumes that \$2.8 billion in additional subsidy payments will be made during the 1992-1996 period. Eliminating the EEP program would save nearly \$1.9 billion during this period.

One disadvantage of eliminating the EEP program is that it has been somewhat effective in increasing U.S. exports above the level they would otherwise have reached. In addition, one of the underlying motivations for the EEP has been to encourage competitors, particularly the European Community, to negotiate reduced subsidies in trade negotiations currently being conducted under the General Agreement on Tariffs and Trade (GATT). Unilateral elimination of the EEP would deprive U.S. negotiators of a bargaining chip in the GATT negotiations.

It is not clear, however, how much the EEP program has increased U.S. grain sales. It has depressed world commodity prices and failed the targeting criteria (since most major U.S. markets now benefit from EEP sales). The two biggest recipients of subsidized grain sales under EEP are the Soviet Union and the Peoples Republic of China. Finally, many critics question the usefulness of EEP in advancing the agricultural trade negotiations in the GATT.

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Budget Authority	80	150	200	200	200	830
Outlays	80	150	200	200	200	830

The Market Promotion program (MPP) was authorized under the 1990 Food, Agriculture, Conservation, and Trade Act to assist U.S. agricultural exporters, particularly when they face unfair trading practices abroad. Payments are made to offset partially the costs of market building and commodity promotion undertaken by state-related, private nonprofit, and private profit-making firms. The MPP continues the Targeted Export Program, which was aimed mainly at specialty crops such as fruits and nuts, but has also targeted wine, plywood, tobacco, feed grains, meat, eggs, and several other agricultural products for promotion. The current CBO baseline assumes that \$200 million would be obligated annually for the program in the 1992-1996 period. Eliminating this program would reduce outlays by \$830 million over the next five years.

An argument for reducing MPP funding is that the assisted groups benefit directly from the market development activities and thus should bear the full costs. Activities promoting exports of nonagricultural goods do not receive similar support. Therefore, why should agribusiness be singled out for this type of federal aid?

Eliminating the MPP program could place U.S. exporters at a disadvantage in international markets. Those concerned about U.S. exports of high-valued agricultural products consider MPP to be a useful tool for developing markets for these products.

**REDUCE COSTS FOR THE DAIRY PRICE SUPPORT
PROGRAM BY REQUIRING PRODUCER CONTRIBUTIONS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Budget Authority	310	340	360	390	420	1,800
Outlays	310	340	360	390	420	1,800

The incomes of dairy producers are protected and increased through the purchase of storable dairy products by the U.S. Department of Agriculture's (USDA) dairy price support program. Their incomes are further supported by marketing orders, which set price minimums for milk going to various uses. The dairy industry is also protected from foreign competition by quotas on imports of dairy products.

Consumers may benefit because the dairy price support program helps to stabilize prices of milk and milk products. Needy families, schools, and other institutions gain through the free distribution of dairy products that are purchased by the USDA. The program can also raise the prices of dairy products, and thus consumer costs, above the levels they would reach without government intervention.

One method of reducing the costs of dairy programs would be to increase the assessments levied on dairy farmers' production. Dairy farmers are now assessed \$0.05 per hundredweight. This assessment will rise to \$0.1125 per hundredweight in subsequent years. Increasing assessments instead by \$0.20 per hundredweight would save an estimated \$1.8 billion over the 1992-1996 period.

This method of reducing dairy program costs would be straightforward and relatively easy to administer. Many dairy producers would favor this approach to cutting program costs over alternatives, such as further or more rapid reductions in federal price supports. A cut in the price support level for milk would cause a drop in the price that both consumers and the government pay for milk and milk products. Government purchases account for a relatively small portion of the total dairy market. Thus, in order to generate a significant amount of savings, the price cut would have to be relatively large. In contrast, an assessment would apply to the marketing of all milk products, so a relatively small assessment would generate significant savings. As a result, the income of dairy farmers would be reduced less by the assessment than by a cut in support prices generating similar budget savings.

Raising these assessments, however, would reduce the net incomes of dairy farmers. Furthermore, the dairy industry would be paying part of the costs of disposing of surplus dairy production. Most of this surplus is used in domestic food assistance programs, which arguably should be paid for by the taxpayer, not the dairy industry.

350-10 **TERMINATE THE FEDERAL CROP INSURANCE CORPORATION PROGRAM AND REPLACE IT WITH STANDING AUTHORITY FOR DISASTER ASSISTANCE**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Mandatory						
Budget Authority	580	350	360	370	380	2,040
Outlays	40	350	350	360	370	1,470
Discretionary						
Budget Authority	380	370	390	400	420	1,930
Outlays	200	360	380	390	410	1,740

The federal government has offered crop insurance through the Federal Crop Insurance Corporation (FCIC) to farmers for many years to protect them against losses caused by natural disasters. In spite of this heavily subsidized insurance program, the government in recent years has reacted to crop shortfalls caused by drought and other natural factors by providing cash or in-kind disaster assistance. The Congress enacted legislation providing such assistance in 1986, 1988, and 1989.

Participation in the federal crop insurance program has grown in the past few years, but it still covers less than half of the eligible acres. Consistently low participation rates have, in part, encouraged enactment of the laws providing disaster assistance for particular years, because so many farmers affected by disasters had no other protection. Belief that this assistance would be forthcoming if disaster strikes could have discouraged some farmers from participating in the insurance program. Outlays for disaster assistance exceeded indemnity payments in the crop insurance program during the 1980s. Between crop years 1981 and 1989, the federal government paid \$6.0 billion for ad hoc disaster assistance and \$3.1 billion for FCIC net indemnity payments.

This option would terminate federally subsidized crop insurance offered through the FCIC and replace it with standing authority to provide disaster assistance. Disaster payments would be made to producers of crops in counties with actual average harvested yields below 65 percent of normal. Once a county was declared eligible, individual farmers would receive disaster payments for any shortfall in their own harvested yield below 60 percent of the normal yield for that county.

The estimates of savings from this option assume the crop insurance program is terminated beginning with the 1992 crops. Savings from eliminating the crop insurance program are partly offset by costs of disaster assistance. The estimate includes additional costs of \$250 million per crop year for disaster assistance.

**IMPOSE A ROYALTY PAYMENT ON COMMUNICATIONS
USERS OF THE ELECTROMAGNETIC SPECTRUM**

	Annual Added Receipts (In millions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Additions to CBO Baseline	1,800	1,900	2,100	2,200	2,400	10,500

This option would institute royalty payments on scarce parts of the electromagnetic or radio spectrum used for communications. To retain their licenses, users of the electromagnetic spectrum who earn revenues from generating or relaying a signal would be charged an annual royalty payment equal to 4 percent of their gross revenues. Royalty payments by major communications users of the electromagnetic spectrum could raise \$10.5 billion between 1992 and 1996. This estimate does not take account of reduced income tax revenues. The receipts from these royalty payments could be considered tax revenues or offsetting collections, depending on the form of the enacting legislation.

The Communications Act of 1934 established the public nature of the electromagnetic spectrum. The Federal Communications Commission (FCC) allocates frequencies to private users through a variety of licensing procedures. Although the FCC already charges user fees to cover the cost of the application and licensing process, license holders have profited from using this scarce public resource without compensating the public. Establishing a royalty payment would be consistent with federal policy in other areas—for example, petroleum production on the Outer Continental Shelf. Since 1979, proposals have been made in the Congress to charge communications users of the electromagnetic spectrum. Previous legislative proposals would charge a royalty payment based on a market's population and number of license holders. This payment structure was designed to reflect the size and competition level of local markets. Basing the payment on gross revenues, however, would also reflect these conditions.

Arguments for a royalty payment emphasize the public nature of the electromagnetic spectrum and its role as a key unpriced factor in the production of communications services. The prices paid for licenses in the private market are indicative of the value of this public resource. The absolute scarcity of spectrum available for some uses—VHF television, cellular telephones, satellite communications—also provides general support for a royalty payment. Many holders of FCC licenses producing communication services earn higher-than-average profits, or economic rents, through their use of this public resource. In these circumstances, royalty payments to the government would leave the economic efficiency of service providers unaffected.

Arguments against a royalty payment are both general and specific. In general, arguments note that this public resource had little or no value at the time most spectrum licenses were issued. The economic value of the resource was created only by the efforts of spectrum users and, thus, use of the spectrum is essentially a property right of private users. Regarding economic rents, the federal income tax already secures a portion for the government. Moreover, a royalty payment based on a formula is likely to capture only the average level of rents in the affected industries, permitting some licensees to continue to earn above-average profits. A final general objection to a royalty payment is that license holders in some markets will increase their prices and pass along the payment to consumers.

More specific arguments against a royalty payment note that some groups of users have experienced decreased profits--for example, AM radio license holders. Some of these license holders have gone out of business, abandoning their FCC spectrum allocation. A cap on the royalty payment of 10 percent of pre-federal income tax net income was included in a previous proposal to address this concern. Broadcasters argue that free use of the spectrum compensates license holders for adhering to public interest regulations. Other proposals recognized this concern by eliminating regulation of content upon implementation of a royalty payment.

Several alternative strategies could be pursued in implementing a royalty payment. The Congress could specify the details of a royalty payment, including the royalty rate and which users would pay. Alternatively, the Congress could provide legislative guidance and specify revenue targets, but could empower an executive agency to determine the rate and the users subject to the payment. Or, the Congress could mandate "royalty bidding," by which a royalty would be required of all license holders, but a competitive bidding process would be used to determine the amount. Royalty bidding could offer both the minimal disruption of a flat rate system and an incentive to improve the economic efficiency of spectrum use.

400-1 ESTABLISH CHARGES FOR AIRPORT TAKEOFF AND LANDING SLOTS

	Annual Added Receipts (In millions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Addition to CBO Baseline	300	300	300	300	300	1,500

The Congress considered imposing charges in fiscal year 1990 for the use of slots for taking off or landing at the four airports where the Federal Aviation Administration (FAA) has established capacity controls: Kennedy International and La Guardia in New York; O'Hare International in Chicago; and Washington National in the District of Columbia. That proposal would have required the FAA to raise \$239 million through these charges for fiscal year 1990. An alternative measure would be to establish similar slot charges on a permanent basis with a target of \$300 million in annual receipts.

Takeoff and landing slots were instituted in 1968 to control capacity and were allocated without charge by the FAA. A total of about 3,300 air carrier slots exist, with an additional 1,300 commuter and general aviation slots at the four controlled airports. (These figures do not include an additional 400 early-morning and late-night slots at Washington National and La Guardia for which there is little demand.) Airlines are currently allowed to buy and sell slots among themselves, with the understanding that the FAA retains ultimate control and can withdraw the slots or otherwise change the rules on their use at any time. These slots have value because the demand for flights exceeds the capacity of the airports and of the air traffic control system at certain times. Although the original allocation of slots was administrative, the current system of allowing purchases and sales of slots by airlines injects market factors into the allocation.

The deficit-reduction estimates for this option are based only on charging for the air carrier slots. Commuter carriers and general aviation, however, could also be charged for their slots. If these users had to compete for slots with air carriers, however, they would probably find themselves priced out of the market. For example, a 20-seat commuter aircraft or a 6-passenger corporate jet is unlikely to be able to pay as much as a 150-seat passenger aircraft. If slots were reserved for commuter carriers and general aviation (as they are now), the market price for such slots would probably be substantially lower than the price of air carrier slots. The additional revenues that could be raised by charging for such slots would be relatively small. Efficiency and revenue could be enhanced by putting all slots in the same market--that is, allowing free competition among all classes of users. Then the slots would be leased to the users who placed the highest value on them.

The main argument in favor of establishing charges for slots is that since the slots reflect the right to use scarce public airspace and air traffic control capacity, private firms and individuals should not capture all the benefits of this scarcity. They should share it instead with the public owners of these rights. Further, these changes would serve as incentives to put these scarce resources to their best use.

The main argument against this proposal is that the scarcity of slots at these airports arises principally from a lack of land and runway space; these fees are not intended to provide increased capacity. Further, if the current prices paid by airlines in the private sale of slots already accurately reflect their value, then a better allocation of these scarce resources might not occur as a result of this proposal. Only a redistribution of the benefits from their use between the private sector and the public would result.

An argument against implementing the proposal at this time is the bleak financial condition of the airline industry. The airlines have had to contend with both rising fuel prices and a decline in passenger demand. In addition, aviation taxes have been increased by 25 percent for fiscal year 1991. Hence, this is a difficult time for establishing fees for slots.

	Annual Added Receipts (In millions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Addition to CBO Baseline	310	320	330	340	350	1,650

The Army Corps of Engineers will spend about \$775 million on the nation's system of inland waterways in 1991, according to CBO estimates. Expenditures for operation and maintenance (O&M) will total about \$385 million; new construction outlays will equal about \$390 million. Current law allows up to 50 percent of inland waterway construction to be funded by revenues from a tax on the fuel consumed by barges using most segments of the inland waterway system. Revenues from the tax currently are about 20 percent of federal outlays for inland waterway construction. All O&M expenditures are paid by general taxpayers.

Imposing user fees that would recover the cost of O&M outlays for inland waterways would reduce the federal deficit by \$310 million in 1992 and \$1.7 billion during the 1992-1996 period. The receipts could be considered tax revenues or an offsetting collection, depending on the form of the implementing legislation. The estimates do not take into account any resulting reductions in income tax revenues.

The advantage of this option is the beneficial effect of user fees on efficiency. Reducing subsidies to water transportation should improve allocation of resources by leading shippers to choose the most efficient transportation route, rather than the most heavily subsidized one. Moreover, user fees would encourage more efficient use of existing waterways, thus reducing the need for new construction to alleviate congestion. Finally, user fees send market signals that point to which additional waterway projects are likely to provide the greatest net benefits to society.

The effects of user fees on efficiency would depend largely on whether the fees were set at the same rate for all waterways or were set according to the cost of each segment. Since costs vary dramatically among the segments, systemwide fees would offer far weaker incentives for cost-effective spending. In 1988, for example, O&M costs on the inland waterways ranged from \$0.48 per thousand ton-miles on the lower Mississippi River to about \$139 per thousand ton-miles on the Allegheny River. A systemwide fee of \$1.69 per thousand ton-miles would recover all O&M outlays but would do little to ration use of the system. Segment-specific fees, in contrast, could substantially change use of the waterways.

An argument in favor of keeping federal subsidies is that they may promote regional economic development. Assessing user fees would limit this promotional tool. Reducing subsidies for inland waterways would also lower the income of barge operators and grain producers in some regions, but these losses would be small in the context of overall regional economies.

**ELIMINATE CASH BENEFITS
UNDER TRADE ADJUSTMENT ASSISTANCE**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Budget Authority	95	150	140	140	130	660
Outlays	95	150	140	140	130	660

The Trade Adjustment Assistance (TAA) program offers income replacement benefits, training, and related services to workers unemployed because of import competition. To obtain assistance, such workers must first petition the Secretary of Labor for certification and then meet other requirements for eligibility. Cash benefits are available to certified workers receiving training, but only after their unemployment insurance benefits are exhausted.

Eliminating TAA cash benefits would reduce federal outlays by \$95 million in 1992 and by \$660 million during the 1992-1996 period. Beneficiaries would not be cut off suddenly; those receiving cash TAA benefits during the last week of the program (ending September 30, 1991) would be permitted to collect their remaining weeks of cash benefits.

The rationale for eliminating TAA cash benefits is to secure more equivalent treatment under federal programs for workers who are permanently displaced as a result of changing economic conditions. Since Title III of JTPA provides cash benefits only under limited circumstances, workers who lose jobs because of foreign competition are now treated more generously than workers who are displaced for other reasons.

Eliminating TAA cash benefits would, however, cause economic hardship for some of the long-term unemployed who would have received them. In addition, TAA now compensates some of the workers adversely affected by changes in trade policy. Some argue, therefore, that eliminating TAA cash benefits could lessen political support for free trade, which economists generally view as beneficial to the overall economy.

**LIMIT THE GROWTH OF FOSTER CARE
ADMINISTRATIVE COSTS TO 10 PERCENT PER YEAR**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Budget Authority	85	200	330	480	630	1,700
Outlays	75	190	310	450	610	1,650

The federal foster care program authorized under Title IV-E of the Social Security Act is an open-ended entitlement program that provides federal matching funds to assist states in providing foster care to children who meet certain eligibility requirements. Each state administers its own program within the federal mandates established in Title IV. Allowable administrative costs incurred by states are reimbursed at a rate of 50 percent. Examples of allowable costs include those for determining eligibility, certain preplacement services, and child placement services, as well as administrative overhead.

Limiting annual increases in payments to each state for administrative costs to 10 percent a year would reduce federal outlays by \$75 million in 1992 and by about \$1.6 billion in the 1992-1996 period. The rapidly escalating costs for administration have been the focus of considerable concern among policy-makers. Costs (adjusted for inflation) increased from less than \$50 million in 1981 to more than \$450 million in 1989—much more rapidly than the increase in caseloads during this period. Many states have experienced a sharp increase in administrative costs at some point in the past decade; in two dozen states, the annual increase in such costs per child exceeded 1,000 percent in at least one year—supporting the theory that much of the growth resulted from changes in their methods for claiming funds, rather than from expanded services to children.

It might not be advisable to cut federal funding to child welfare agencies now, however, as these agencies struggle to deal with rising reports of child abuse and neglect. A 10 percent limit would represent a significant cut, given projected annual increases in foster care caseloads of about 9 percent and projected annual growth in total administrative costs averaging 19 percent. To the extent that states would respond to the restriction by cutting back on services, children in need of foster care could be harmed. Limiting the percentage increase each state could receive would also lock in the current differences in costs per child. In 1989, average federal costs per child for Title IV-E administration ranged from less than \$100 per month in eight states to over \$500 per month in five states and the District of Columbia. These differences could be reduced by alternative approaches, such as tightening the definition of allowable administrative activities.

**COMBINE FUNDING TO STATES FOR THE COSTS OF
ADMINISTERING AFDC, MEDICAID, AND FOOD STAMPS
INTO A SINGLE INDEXED GRANT**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Budget Authority	530	870	1,240	1,660	2,070	6,350
Outlays	530	870	1,240	1,660	2,070	6,350

The Aid to Families with Dependent Children (AFDC) program provides cash assistance to low-income families with children in which one parent is absent or incapacitated, or to families in which the primary earner is unemployed. The Medicaid program provides medical assistance to low-income people who are recipients of Supplemental Security Income (SSI), current or recent recipients of AFDC, and certain other low-income people. The Food Stamp program provides coupons redeemable for food to low-income households to enable them to buy a nutritionally adequate low-cost diet.

The federal government pays half of most administrative costs in all three programs; state and local governments pay the remaining share. Higher matching rates have been instituted for some types of expenses as an incentive for local administrators to undertake more of a particular administrative activity than they would if such expenses were matched at 50 percent. For example, enhanced matching rates are applied in all of these programs to the costs of some computer operations and some antifraud activities.

The administrative activities matched at higher rates currently represent a relatively small proportion of all administrative costs in the Food Stamp and AFDC programs, but constitute a larger share of Medicaid administrative costs. In the Food Stamp and AFDC programs, administration mainly consists of determining eligibility and benefit amounts. In the Medicaid program, however, determining eligibility represents a relatively small share of administration, since the AFDC and SSI programs largely carry out this function. Consequently, activities that are matched at higher rates—including the costs of automated claims processing, reviewing medical and health care use, and establishing and operating a fraud control unit—constitute a much higher percentage of Medicaid administrative costs.

This option would set all administrative matching rates for AFDC, Food Stamps, and Medicaid at 50 percent in 1992; thereafter, it would combine the administrative funding for the three programs into a single grant whose growth would be indexed to the GNP deflator. Federal outlays would be reduced by \$530 million in 1992 and by about \$6.4 billion over the 1992-1996 period. About 90 percent of the

savings would be in Medicaid; 6 percent would be in AFDC; and the remaining 4 percent would be in Food Stamps.

Reducing the higher matching rates to 50 percent might be appropriate to the extent the need to provide special incentives for these activities no longer exists. For example, all state Medicaid programs already have established computer systems and are currently operating fraud and abuse units. Providing the administrative funds as a block grant would enable states to manage these funds more flexibly.

States might respond to this option by reducing their administrative efforts, however, and might thereby raise program costs and offset some of the federal savings. Specifically, AFDC and Food Stamp benefits might increase if errors or fraud occurred more often in spite of the penalties states already face when errors exceed a certain rate. States might also make less effort to eliminate waste and abuse in payments to providers under Medicaid. In addition, this proposal might harm recipients by encouraging states to slow the growth of benefits over time or to limit services provided under Medicaid in order to constrain total state costs. Alternatively, other state services would have to be cut or state taxes would have to be raised to cover the states' higher share of administrative costs.

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Tax Some Employer-Paid Health Insurance						
Income Tax	4.3	7.2	8.7	10.4	12.2	42.8
Payroll Tax	2.9	4.9	5.9	7.1	8.3	29.1
Total	7.2	12.1	14.7	17.4	20.5	71.9
Tax Employer-Paid Health Insurance, but Allow a Credit for Some Employer and Individual Contributions						
Income Tax	1.2	-0.1	1.1	2.4	3.9	8.5
Payroll Tax	17.3	26.4	28.8	31.3	34.0	138.0
Total	18.5	26.4	30.0	33.7	37.9	146.5

SOURCE: Joint Committee on Taxation.

Employees do not pay taxes on income received in the form of employer-paid health care coverage. This exclusion will reduce income tax revenues and Social Security payroll tax revenues by a total of about \$64 billion in fiscal year 1992.

Tax Some Employer-Paid Health Insurance. One way to limit the exclusion would be to treat as taxable income for employees any employer contributions (including those in cafeteria plans and flexible spending accounts) that exceed \$325 a month for family coverage and \$150 a month for individual coverage (in 1992 dollars); these amounts would be indexed to reflect future increases in the general level of prices. This option would raise income tax revenues by about \$43 billion and payroll tax revenues by about \$29 billion over the 1992-1996 period. Including employer-paid health care coverage in the Social Security wage base, however, would lead to increased outlays on benefit payments that would offset most of the added payroll tax revenues from this option over the long run. The option would also raise the state income tax liabilities of individuals in those states with tax bases linked to the federal tax base, unless those states took offsetting actions.

An advantage of this approach is that it would eliminate the tax incentive to purchase additional coverage beyond the ceiling. Without such coverage, there would be stronger incentives to economize in the medical marketplace, thereby reducing upward pressure on medical care prices. Over the long run, indexing the ceilings would limit their erosion by general inflation. Finally, the Congress has already limited the exclusion for employer-paid, group term life insurance in a similar way.

One disadvantage of limiting the tax subsidy is the difficulty of determining just when extensive coverage becomes excessive. Moreover, a uniform ceiling would have uneven effects, since a given employer's contribution purchases different levels of coverage depending on such factors as geographic location and the demographic characteristics of the firm's work force. Finally, if health insurance costs continue to rise faster than the general level of prices, the indexing provision of this option would gradually reduce subsidies for employer-paid health insurance. This effect is especially of concern to people who argue that current subsidies for private-sector benefits help avoid the need for public provision of similar benefits.

Tax Employer-Paid Health Insurance, but Allow a Credit for Some Employer and Individual Contributions. Another option would be to treat all employer-paid health insurance premiums as taxable income, but offer an individual income tax credit of 20 percent for health insurance premiums up to the amounts described above for family and individual coverage. The credits would be available to taxpayers regardless of whether an employer paid for or sponsored the coverage. At this percentage of credit and with these ceilings on premiums, the proposal would increase income tax revenues by about \$9 billion over the 1992-1996 period--the net result of \$ 203 billion in revenues if there were no credit less \$194 billion in new income tax credits. Payroll tax revenues would also rise substantially, by about \$138 billion over the same period. As under the first option, however, increases in Social Security outlays would offset most of the added payroll tax revenues in the long run. This alternative would substantially raise the state income tax liabilities of individuals in states with tax bases linked to the federal tax base, unless these states took offsetting actions.

In addition to eliminating the tax incentive to purchase health insurance above the limits, as under the first alternative, an added advantage of this option is that the subsidy would be made available to all taxpayers having health insurance, without regard to their employment status. Moreover, the subsidy per dollar's worth of eligible health insurance would no longer be higher for taxpayers with higher marginal tax rates (and higher incomes).

A drawback of this option is that the benefits of the tax credit would not be available to low-income individuals and families who have no liability under the federal personal income tax, unless the credit were made refundable. Such a refund, however, would substantially reduce the net revenue gain discussed above. Moreover, as with the first option, opponents of this one have several concerns: it would be difficult to determine at what level health insurance coverage becomes excessive, effects would vary among geographic areas, and the subsidy for health insurance would probably decline over time.

**REFORM THE FEDERAL EMPLOYEES HEALTH
BENEFITS PROGRAM BY MODIFYING HOSPITAL
REIMBURSEMENT**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Budget Authority	0	90	250	460	590	1,390
Outlays	0	90	240	440	570	1,340

The Federal Employees Health Benefits (FEHB) program offers health insurance coverage for federal employees, retirees, and their dependents. The program covers about 4 million enrollees at a yearly cost to the federal government of about \$7 billion. Reforming hospital reimbursement, as described below, would reduce such costs and thus lower federal outlays in 1996 by an estimated \$0.6 billion. The savings that result from a gradual reduction in the rate hospital costs would be allowed to rise. For calendar year 1996, relative to the level otherwise expected for systemwide costs, the reductions would total 15 percent. Through 1996, federal budget savings would total \$1.3 billion. To realize these budgetary savings, over one-fourth from national defense functions, the Congress would need to reduce agency funding accordingly. (This estimate assumes the new reimbursement system would begin to take effect for the FEHB contract year beginning January 1993. Budgetary savings would be realized from a 5 percent reduction in hospital payment rates in 1993, a 10 percent reduction in 1994, and a 15 percent reduction from baseline rates thereafter. The estimates exclude amounts paid by the U.S. Postal Service because such costs are eventually paid by mail users instead of taxpayers.)

FEHB insurance carriers pay hospitals primarily in two ways--some on the basis of actual charges, and others on the basis of predetermined rates that have been negotiated with the hospitals and that reflect certain discounts. An alternative reimbursement system could require carriers to use a prospective payment system patterned after the one instituted in 1987 by the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) for military dependents and retirees. (Last year, moreover, the Congress required prepayment of insured hospital costs for the relatively small group of federal retirees over age 65 but not covered by Medicare.) The military program modified the diagnosis-related group (DRG) payment schedules used by Medicare to reflect the health care needs of younger patients. Under a modified DRG system, hospitals receive a fixed payment per case based primarily on a patient's diagnosis and adjusted for certain hospital characteristics that affect the costs of treating that diagnosis. The size and timing of premium reductions would depend on rate negotiations with more than 400 FEHB insurance carriers. Savings realized under this prospective payment system eventually would allow for lower

premium payments by both the federal government and enrollees. The reductions realized in 1993 through 1996 could save postal and nonpostal enrollees nearly \$350 million.

With few exceptions, such as the Washington, D.C., area, FEHB enrollees represent a relatively small portion of hospital cases. An expanded DRG reimbursement system should save the government money without adverse financial effects on most hospitals. Several states have implemented DRG systems, although most have had little initial success in reducing hospital costs. Initial budgetary impacts aside, the information generated by a DRG approach would provide a valuable management tool for long-term cost control. Its management improvement attributes and its potential for long-term savings make the option an important ingredient in considering other reforms of the FEHB program. (Most reform packages under consideration contain some cost-control measures, but produce overall net costs as a result of both benefit restructuring and adjustments in premiums and risk assignment.)

This proposal would raise some of the same concerns about jeopardizing the quality of health care that were raised during debate on adopting the DRG scheme for Medicare and again for CHAMPUS. The DRG payment system has not yet been refined to the point where it recognizes all of the appropriate cost variations for treating different patients with the same diagnosis; nor can it identify all of the relevant cost variations among alternative hospitals. As a result, some hospitals might realize a profit from cases for which an identical diagnosis in a different hospital could represent a financial loss. Such economic forces might cause hospitals, especially in localities with significant numbers of FEHB patients, to shift care to a local competitor or to limit the amount of care provided. In other cases, especially in areas with a relatively high concentration of federal workers or annuitants, hospitals might try to collect excess expenses directly from FEHB patients or to shift some costs and procedures to outpatient services not covered by DRG fee schedules. (Vigilant program monitoring should, of course, limit the opportunity for such abuse.)

Conversely, the longer the federal government does not adopt a DRG hospital payment scheme for FEHB, the more vulnerable it becomes to cost shifts directed at its enrollees by hospitals faced with controls placed on them by other insurance plans. From this perspective, the FEHB program may be the last large insurer not incorporating a DRG payment scheme, and the estimated long-term savings may be accordingly understated. (Payment rates, of course, can be set to achieve whatever savings policymakers deem tolerable.)

**PREFUND THE GOVERNMENT'S SHARE OF
FEDERAL RETIREES' HEALTH INSURANCE COSTS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Budget Authority	0	0	-860	-1,500	-1,600	-3,960
Outlays	0	0	370	630	700	1,700

NOTE: The negative amounts for budget authority represent payments by nonpostal agencies into a trust fund for annuitant health care.

Upon retirement, more than 80 percent of federal workers elect to continue their employer-provided health insurance coverage. The federal share of continued protection under the Federal Employees Health Benefits (FEHB) program averages 68 percent of annual premiums. Currently, these costs are recognized as an annual expense throughout an annuitant's retired years and, as such, are financed on a pay-as-you-go basis. Instead, the government could prefund its share of annuitants' premiums by annually investing a fixed percentage of covered payroll. This method of financing health care for federal retirees and their dependents would shift the recognition of federal costs for such deferred compensation from the years of retirement to the years of active employment. (Last year, the Congress broadened the U.S. Postal Service's pay-as-you-go requirements covering health benefit costs for postal annuitants and survivors. This year, the Administration is proposing a variety of FEHB reforms, including certain modifications in the way costs for previous years' liabilities are recouped.)

Prefunding annuitant health insurance generally--at least for the nonpostal agencies--would not increase or decrease governmentwide spending. In the near term, most agencies would respond to the new cost requirement by requesting larger annual appropriations. The agencies' increased payments would represent offsetting income to a new on-budget trust fund and earn interest until expended. By contrast, the additional payments from the now off-budget Postal Service would, as offsetting income, reduce net spending from on-budget accounts that fund annuitant health care. The reduction would not decrease off-budget deficits until postage rates were increased to cover the higher Postal Service payments. Estimated five-year outlay savings from the increased postal receipts, assuming a February 1994 effective date, total \$1.7 billion. (This date coincides with CBO's assumptions concerning the next increase in postage rates.)

For estimating purposes, this option assumes an annual employer contribution set at 4 percent of payroll as a minimum to prefund future federal outlays. The option would apply the advanced-funding procedure only for those workers covered by the relatively new Federal Employees' Retirement System (FERS), which is financed on

an accrual cost basis. (This proposal would not alter the level or timing of contributions made by postal and nonpostal annuitants.)

The changes this option poses would, if enacted, amplify changes emerging in the private sector's financial management of health care benefits. The Financial Accounting Standards Board (FASB), the private body that sets financial reporting standards, now recommends that statements of corporations recognize liability for post-retirement health care. Such liabilities are substantial. Moreover, about three-fifths of the large firms in a 1990 survey have adopted some form of prefunding or may do so in the future. This option would also improve the recognition of government operating costs and allow better management of human resources.

Critics point out that calculating future liabilities for annuitant health care insurance is highly complex and uncertain. Adopting a new prepayment scheme for federal annuitants thus seems ill-advised. The accounting practices in the private sector need not apply unambiguously to most governmental operations that, unlike mail service, are not self-financing. In addition, mail users would likely claim that the prefunding requirement is advanced, largely at their expense, to improve the near-term cash flow of the U.S. Treasury. Moreover, the Congress in 1985, 1989, and 1990 addressed the issue of funding health care for postal annuitants and survivors by requiring the Postal Service to pay, on a cash basis, the employer's share for workers retired after June 30, 1971. (When employees covered by FERS begin to retire after the year 2000, the current pay-as-you-go system would need adjusting to conform with this prefunding option.)

The Postal Service claims exemption from the FASB accrual cost accounting standards because the governmentwide FEHB program is considered a multiemployer plan in that the numerous agencies of the federal and District of Columbia governments are liable only for the amount billed each year. A contrary position is that the federal government, as the single employer of nearly all FEHB enrollees, should assign responsibility for annuitant health care costs to the individual entities that deliver federal services. (Some accountants maintain that a policy to assign costs to postage ratepayers could be appropriately executed whether the FEHB is defined as a single or multiemployer plan.)

While the Congress pursued annuitant health care financing on a pay-as-you-go rather than on an accrual basis, continuing it means subsidizing today's postal operations at the expense of future customers. Thus, the prefunding option provides interperiod accounting equity while the current system does not. Current postal users would be charged full costs for services, including an allowance for health care entitlements that commence when workers retire. The higher postage rates to fund the 4 percent add-on should not significantly affect demand for mail service. (But demand could be seriously depressed if the add-on were increased to fund previous years' liabilities and interest not covered by this option.) Finally, some analysts question the fairness of the Congress imposing yet another budget reduction on the Postal Service given past actions to limit its capital improvement and to require increased funding of certain annuitant health care and other retirement benefits.

570-1 **REDUCE MEDICARE'S DIRECT PAYMENTS
FOR MEDICAL EDUCATION**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Outlays	120	170	190	190	200	870

Medicare's prospective payment system does not include payments to hospitals for the direct costs they incur in providing graduate medical education (GME)—that is, residents' salaries and fringe benefits, administrative costs, teaching costs, and hospitals' associated overhead costs. Instead, these payments are made separately, but also prospectively, based on Medicare's share of the hospital's 1984 cost per resident indexed for subsequent increases in the level of consumer prices. Medicare's GME payments, which are received by about one in five hospitals, totaled \$1.0 billion in 1990.

This option reduces the overhead payment for nonprimary care residents in their initial residency period and eliminates the overhead payment for nonprimary care residents beyond their initial residency period. Hospitals' GME payments would be based on the national average salary paid to residents in 1987, updated annually by the Consumer Price Index for urban areas. Reimbursement for primary care residents would be 175 percent of the national average salary. This weighting provides a payment amount close to the average that Medicare pays per resident under the current system. The corresponding weights for nonprimary care residents in their initial residency period and nonprimary care residents beyond their initial residency period would be 145 percent and 120 percent, respectively. The savings over the 1992-1996 period would total about \$0.9 billion.

Unlike the current system, in which GME payments vary considerably from hospital to hospital, this option would assure that every hospital was reimbursed the same amount for the same type of resident. Efficient hospitals would be rewarded by being able to keep any excess reimbursement over the cost of training, and inefficient hospitals would be penalized. The overall reduction in the level of subsidies might be warranted since the United States is facing a projected aggregate surplus of physicians. Moreover, since physicians earn much higher incomes as a result of their graduate training, they might reasonably contribute more to these costs themselves. This could occur if hospitals responded to the reimbursement changes by cutting residents' salaries or fringe benefits.

Reducing Medicare's GME payments could have some drawbacks, however. Some physicians incur substantial debts during their undergraduate medical education, which they must pay off when they begin to practice medicine. Requiring physicians to contribute to their residency costs might further discourage physicians from

entering primary care or locating their practices in low-income areas. Decreasing GME reimbursement could force some hospitals to reduce the resources they commit to training, jeopardizing the quality of their medical education programs. A few hospitals might eliminate their training programs altogether, which could reduce access to health care services in some communities.

**REDUCE MEDICARE'S PAYMENTS FOR THE INDIRECT
COSTS OF PATIENT CARE THAT ARE RELATED TO
HOSPITALS' TEACHING PROGRAMS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Reduce the Teaching Adjustment to 4.05 Percent						
Outlays	1,150	1,400	1,550	1,700	1,850	7,650

The Social Security Amendments of 1983 established the current prospective payment system (PPS) under which Medicare reimburses hospitals for inpatient services provided to beneficiaries. Higher rates are paid to hospitals with teaching programs to cover their additional costs of caring for Medicare patients. In particular, payments to these hospitals are raised by approximately 7.7 percent for each 0.1 increase in the hospital's ratio of full-time equivalent interns and residents to its number of beds. This adjustment was included both to compensate hospitals for their indirect teaching costs--such as the greater number of tests and procedures thought to be prescribed by interns and residents--and to cover higher costs in teaching hospitals that are caused by a variety of factors that are not otherwise accounted for in setting the PPS rates. These factors include severity of illness within diagnosis-related groups, location in inner cities, and a more costly mix of staffing and facilities--all of which are associated with large teaching programs.

Estimates of the indirect teaching adjustment based on cost data from the 1984-1988 period suggest that the teaching adjustment could be lowered to a value in the range of 2 percent to 7 percent, depending on which year's data are used and which of many possible estimating assumptions are chosen. If the teaching adjustment were lowered to 4.05 percent, outlays would fall by about \$7.7 billion over the 1992-1996 period.

This option would better align payments with the actual costs incurred by teaching institutions. It would, however, considerably reduce payments to teaching hospitals. If these hospitals now use some or all of the excess payments to fund activities such as charity care, the access to and quality of care could diminish for some people.

**CAP INTERN-AND-RESIDENT-TO-BED RATIOS AT 1989
VALUES FOR MEDICARE PAYMENT PURPOSES**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Outlays	50	85	130	160	190	620

Payments to teaching hospitals, under Medicare's Prospective Payment System, are raised by approximately 7.7 percent for each 0.1 increase in the hospital's ratio of the number of full-time equivalent interns and residents to its number of beds. (See 570-4 for a more detailed description of this adjustment.)

Since the ratio is calculated from the most recent information on the number of interns and residents and the number of beds, some hospitals have a higher ratio--and, therefore a higher adjustment--than they did last year while other hospitals have a lower ratio--and therefore a lower adjustment. The intern-and-resident-to-bed ratio used in calculating the teaching adjustment could be capped at the 1989 level after October 1991. (In other words, a hospital's intern-and-resident-to-bed ratio would be allowed to fall below the 1989 level, but it would not be allowed to rise above that level.) If this policy were carried, outlays would be reduced by \$620 million over the 1992-1996 period.

This option would, on average, better align payments with the actual costs teaching institutions incur (see 570-4). Reductions to specific hospitals, however, would be quite arbitrary. For example, a hospital with a ratio of 0.2 in both 1989 and 1992 would receive about twice the payment of a hospital with a ratio of 0.1 in 1989 and 0.2 in 1992.

REDUCE MEDICARE'S REIMBURSEMENT FOR HOSPITALS' CAPITAL COSTS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Inpatient	270	380	420	460	1,300	2,850
Outpatient	30	50	60	75	200	410
Total Outlays	300	430	480	530	1,500	3,250

In paying for hospital services, Medicare distinguishes between capital-related expenses and other operating expenses. Capital-related costs include the depreciation, interest, rental, tax, and insurance expenses associated with acquiring facilities and major equipment. Currently, Medicare's reimbursements for both inpatient and outpatient capital are based on allowable costs. The Omnibus Budget Reconciliation Act of 1987 requires, however, that payments for inpatient capital expenses be reimbursed on a prospective, per-case basis, beginning on October 1, 1991. Outpatient capital reimbursements will continue to be based on allowable costs.

Under the Omnibus Budget Reconciliation Act of 1990 (OBRA-90), the prospective rates for inpatient capital are to be reduced so that aggregate inpatient capital payments in fiscal years 1992 through 1995 will be equal to 10 percent less than the estimated amount that would otherwise have been paid under cost-based reimbursement. For outpatient capital, OBRA-90 requires that payments to each hospital be reduced by 10 percent over the 1992-1995 period.

Aggregate inpatient capital payments could, instead, be set equal to 15 percent less than the estimated amount that would otherwise have been paid under cost-based reimbursement for the 1992-1996 period. Similarly, outpatient payments could be reduced by 15 percent. (Certain types of hospitals, including sole community hospitals, have generally been excluded from the reductions in capital payments. Under the option, they would continue to be excluded from reductions in payments for outpatient capital.) This option would save \$300 million in 1992, and \$3.2 billion over the 1992-1996 period.

The reductions in the payments for inpatient and outpatient capital would be consistent with past reductions in capital payments. For fiscal years 1989 through 1991, the Congress reduced Medicare's reimbursement for inpatient capital by 15 percent. This option would continue the 15 percent reduction in total payments for inpatient capital (relative to what costs would have been under cost-based reimbursement), instead of applying the 10 percent reduction specified in OBRA-90. Similarly, payments for outpatient capital were reduced by 15 percent for 1990 and 1991, and the option would continue this level of reduction.

The reduction in payments might be difficult for some hospitals to absorb, however. While many hospitals will probably benefit in 1992 from the transition to a prospective system for inpatient capital, some will probably experience large drops in their payments for capital. This option might have a particularly strong effect on these providers, which could adversely affect access to hospital services or quality of care in some locations.

**ELIMINATE RETURN-ON-EQUITY PAYMENTS FOR
PROPRIETARY SKILLED NURSING FACILITIES**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Outlays	45	60	60	65	70	300

Medicare pays for care in a skilled nursing facility (SNF) for eligible people discharged from an acute care hospital who require skilled nursing or rehabilitative care services as part of an episode of acute care. After annual growth averaging about 5 percent between 1984 and 1987, Medicare's payments to SNFs grew by 16 percent in 1988, 205 percent in 1989, and 14 percent in 1990 before falling slightly in 1991. This growth reflected the combined impact of administrative changes that were designed to clarify eligibility for benefits and the temporary expansion of eligibility under the Medicare Catastrophic Coverage Act. Annual growth in total outlays for SNFs between 1991 and 1996 is projected to average 7.5 percent.

For skilled nursing facilities that are under proprietary ownership, Medicare payments include an amount designed to provide a rate of return on equity capital that is equal to the average annual interest rate paid by the Federal Hospital Insurance Trust Fund. Equity capital is generally represented by the difference between assets and liabilities after excluding certain specified items. In addition, a Medicare-certified proprietary SNF may depreciate capital investments over a specified period. In 1991, Medicare payments to proprietary SNFs for return on equity are projected to be \$50 million.

The requirement for Medicare payments to proprietary SNFs for return on equity (ROE) could be eliminated. This option would reduce Medicare outlays by \$45 million in 1992 and by about \$300 million over the 1992-1996 period.

This option would result in more consistent treatment of return on capital across the Medicare program. Whereas current law requires Medicare ROE payments for proprietary SNFs, it precludes such payments altogether for hospitals' inpatient and outpatient services and it permits such payments for other facilities only where they are required by regulations. The option would also result in more consistent treatment of Medicare certified-SNFs because it would eliminate the differential treatment for proprietary and nonproprietary SNFs.

By reducing the overall return on capital invested in SNFs, however, this option would reduce the incentive for private investment in the nursing home industry at a time when demographic and other factors are projected to increase nursing home use faster than both real GNP and total population. In addition, if proprietary SNFs responded to eliminating ROE payments by restructuring their capital to emphasize

debt rather than equity, they would incur additional interest costs that Medicare might deem allowable and that might partly offset the savings to Medicare from nonpayment of ROE. Finally, OBRA of 1990 required the Secretary of Health and Human Services to develop, and submit by September 1991, a proposal for prospective reimbursement of SNFs; some would consider it more appropriate to integrate changes in ROE payments with any move to prospective payment of SNFs.

REDUCE OUTPATIENT DEPARTMENT REIMBURSEMENT LEVELS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Outlays	460	540	630	740	870	3,250

Since 1983, the Congress has enacted several provisions that have changed the way that Medicare reimburses hospitals for some outpatient services from the previous reasonable cost approach. In particular, renal dialysis services are reimbursed according to a prospective payment system, fee schedules are used for laboratory services and durable medical equipment, payments for radiology services and some other outpatient procedures are based on a weighted average of hospital-specific costs and physicians' prevailing charges, and ambulatory surgery facility fees are based on a weighted average of hospital-specific costs and the prevailing fee for freestanding ambulatory surgery centers in the area. Other therapeutic services are still generally reimbursed on a reasonable cost basis.

Outpatient payments are one of the fastest growing components of Medicare expenditures, accounting for a projected 20 percent of Supplementary Medical Insurance (SMI) payments in 1991. Between 1980 and 1990 hospital outpatient reimbursement grew at an average annual rate of approximately 19 percent, compared with 15 percent for other SMI expenditures and 10 percent for Hospital Insurance (HI) expenditures. Between 1991 and 1996, SMI outlays for hospital outpatient expenditures are projected to increase at an average annual rate of almost 17 percent.

Under this option, Medicare reimbursement for some outpatient services would be cut by 13 percent in 1992. Specifically, this option would affect outpatient services that are currently reimbursed on a reasonable cost basis, including ambulance services, emergency visits, clinic visits, therapy services, the administration of drugs that cannot be self-administered, and the cost-reimbursed components of radiology, diagnostic, and surgery services. Outpatient services that would be excluded from the reduction include renal dialysis services, clinical laboratory services, and the components of radiology, diagnostic, and surgery services that are not cost-reimbursed. Outpatient capital reimbursement would also be excluded. The savings would be \$0.5 billion in 1992 and \$3.2 billion over the 1992-1996 period.

In addition to cutting Medicare's outlays, this option would provide strong incentives for hospitals to control burgeoning outpatient costs by providing care more efficiently. It would also counter the increased costs that may have resulted from hospitals shifting some services from the inpatient setting to the outpatient setting in response to the incentives of the Prospective Payment System. A disadvantage to this option is that access to outpatient care and the quality of outpatient care might be reduced for some Medicare beneficiaries.

**CONTINUE MEDICARE'S TRANSITION TO PROSPECTIVE
RATES FOR FACILITY COSTS IN HOSPITAL OUTPATIENT
DEPARTMENTS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Outlays	120	440	640	750	880	2,850

The Medicare program pays for services provided in hospital outpatient departments with separate payments to the facility and to the physician. The facility component includes reimbursement for the services of non-physician personnel, drugs and biologicals, other health services, rent, and utilities. Medicare used to reimburse hospital outpatient departments on a reasonable cost basis for most services. The Omnibus Budget Reconciliation Act of 1986 changed Medicare's payment method for most surgical procedures performed in hospital outpatient departments. Instead of reasonable cost reimbursement, hospitals now receive the lesser of costs or a blend of hospital-specific costs and the prospective rate received by free-standing ambulatory surgery centers (ASCs) in the area. In 1987, a similar change was enacted for paying facility costs associated with outpatient radiology and diagnostic services. In both these areas, the hospital-specific share is currently 42 percent and the prospective rate share is 58 percent.

Outpatient payments are one of the fastest growing components of Medicare expenditures, accounting for a projected 20 percent of Supplementary Medical Insurance (SMI) payments in 1991. Between 1991 and 1996, SMI outlays for hospital outpatient services are expected to increase at an average annual rate of almost 17 percent. Major factors in this increase are technological advances that allow hospitals and physicians to substitute outpatient surgical procedures and technologies for inpatient surgical procedures.

Under this option, the hospital-specific portion of the blended reimbursement rate for the facility costs of outpatient surgery, radiology, and diagnostic services would be phased out in 1993, with a transitional blend for 1992 of 25 percent of costs and 75 percent of the prospective rate. Savings to the Medicare program would be \$120 million in 1992 and \$2.8 billion over the 1992-1996 period.

In addition to reducing Medicare's costs, this option would result in the same payment system for hospital outpatient departments and ambulatory surgery centers. Thus, it would reduce the greater incentive and ability of hospitals to compete for patients through costly capital acquisitions. Hospitals would also have stronger incentives to control the costs of outpatient surgery, radiology, and diagnostic services, since they could no longer automatically pass through part of these costs to Medicare. Nonetheless, experience with the partially prospective rates for outpatient

departments is limited, and it is not yet known whether the current blended rate is sufficient to ensure continued access for Medicare beneficiaries. If patients at risk for complications are advised to receive treatment in hospital outpatient departments rather than ASCs because of the ready availability of advanced support systems in hospitals, then paying higher rates to hospitals than to ASCs might be appropriate. In addition, this option could exacerbate the financial problems some hospitals are facing.

**CHARGE \$1 FEE FOR SMI CLAIMS
THAT ARE NOT BILLED ELECTRONICALLY**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Outlays	250	275	260	225	175	1,185

Currently, about 40 percent of all claims under the Supplementary Medical Insurance (SMI) program are billed electronically, while the rest are submitted on paper. In 1991, about 500 million claims were processed, with an average of 2 items per claim.

Medicare could create an incentive for providers to switch to an electronic claims submission system. Under this option, Medicare's reimbursements would be reduced by \$1 for each item not billed electronically. Medicare would provide electronic billing software to rural physicians at a nominal charge of \$20 to \$30. Net savings to Medicare would be \$250 million for 1992, and \$1.2 billion over the 1992-1996 period. Net SMI outlays would be reduced by 0.5 percent over the five-year period.

This option would reduce Medicare's costs not only because of the \$1 fee on paper bills, but also because processing costs for Medicare's administrative agents would be lower on claims that were switched from paper to electronic billing--because manual entry of data by clerical personnel would no longer be necessary. It would also reduce the probability that data were entered incorrectly, requiring more clerical time to correct later. Physicians could benefit as well, because the software used for electronic submittal of claims automatically checks for missing or inconsistent entries, thereby preventing problems that can delay Medicare's payment to physicians.

Initially, however, physicians would incur the additional costs of buying the equipment and software that would be required to submit bills electronically. They might also incur additional costs to train office personnel to use the new equipment.

**REDUCE MEDICARE'S PAYMENT FOR
INTRAOCULAR LENSES TO \$100**

Savings from CBO Baseline	Annual Savings (in millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Outlays	115	180	185	190	195	865

Medicare pays for nine-tenths of all surgical procedures for the treatment of cataracts in the United States. During this surgery, the natural lens of the eye is removed and, in most cases, an intraocular lens (IOL) is implanted. Currently, for each IOL used, Medicare pays a flat fee of \$200 to ambulatory surgicenters, and an average of \$265 to hospital outpatient departments. Total payments under Medicare for IOLs are expected to be about \$325 million in 1991.

Some argue that Medicare pays more than necessary for IOLs, often citing Canadian prices to justify reducing Medicare's payment. If Medicare's payment in all sites was reduced to \$100 as of January 1, 1992, savings to Medicare would total \$115 million for fiscal year 1992. If the payment rate was indexed to the consumer price index in subsequent years, savings over the 1992-1996 period would be \$865 million, and net SMI outlays would be reduced by 0.4 percent.

This option would create an incentive to providers to negotiate lower prices from companies that manufacture and sell IOLs. Whether or not providers were successful at negotiating lower wholesale prices, enrollees would benefit from Medicare's lower payment rate because patients pay 20 percent coinsurance on IOLs, and balance-billing for this service is rare.

If providers were unable to negotiate reductions in the prices they pay for IOLs, however, they would find it less profitable to perform cataract surgery. This fact, together with expected reductions in Medicare's payments to the physicians performing the surgery, might reduce access to this procedure in some areas. Even if access did not become a general problem, the flat rate of \$100 for IOLs might induce some providers to substitute lower quality IOLs for the ones they had used previously, perhaps necessitating later replacement with all the attendant costs of a second surgery.

**INCREASE AND INDEX MEDICARE'S DEDUCTIBLE
FOR PHYSICIANS' SERVICES**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Outlays	890	1,680	2,215	2,830	3,585	11,200

One way to achieve appreciable federal savings in Medicare's Supplementary Medical Insurance (SMI) program is to increase the deductible--that is, the amount that enrollees must pay for services each year before the government shares responsibility. The deductible is now \$100 a year, and has been increased only three times since Medicare began in 1966, when it was set at \$50. The deductible has fallen relative to average annual per capita charges under the SMI program from 45 percent in 1967 to about 5 percent in 1991. Relative to the average annual Social Security benefit, the deductible has dropped from 5 percent in 1967 to 1.4 percent in 1991.

Increasing the SMI deductible to \$150 on January 1, 1992, would save \$890 million in fiscal year 1992. If the new deductible was indexed to the rate of growth in SMI charges per enrollee for 1993 and later years, savings would be \$11.2 billion over the 1992-1996 period, and net outlays for SMI would be reduced by 4.6 percent. By 1996, the deductible amount would be \$230.

An increase in the deductible amount would enhance the economic incentives for prudent consumption of medical care by enrollees, while spreading the burden among most enrollees. No enrollee's out-of-pocket costs would rise by more than \$50 in 1992.

The additional out-of-pocket costs under this option might, however, discourage some low-income enrollees who are not eligible for Medicaid from seeking needed care. In addition, costs to states would increase because their Medicaid programs pay deductible amounts for dual Medicaid/Medicare beneficiaries.

**INCREASE THE PREMIUM FOR PHYSICIANS' SERVICES
UNDER MEDICARE TO 30 PERCENT OF PROGRAM COSTS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Outlays	1,715	2,465	2,750	3,050	4,570	14,550

Benefits under Medicare's Supplementary Medical Insurance (SMI) program are partially funded by monthly premiums paid by enrollees, with the remainder paid from general revenues. Although the SMI premium was initially intended to cover 50 percent of the cost of benefits, between 1972 and 1982 premium receipts covered a declining share of SMI costs—falling from 50 percent to 25 percent. This drop occurred because premium increases were limited by the cost-of-living adjustment (COLA) for Social Security benefits (which is based on the consumer price index), but the per capita cost of the SMI program increased faster. Since 1982, premiums have been set to cover 25 percent of average benefits for an aged enrollee, although under current law the COLA will again limit the premium beginning with the 1996 increase.

If the premium was set to cover 30 percent of benefits for 1992 and for all years thereafter, there would be savings of \$1,715 million in fiscal year 1992, and savings of \$14.6 billion over the 1992-1996 period. Net outlays for SMI would be reduced by about 6 percent over this period. The premium for 1992 would be \$38.00 a month, instead of \$31.80. These estimates assume a continuation of the current "hold harmless" provision, which ensures that no enrollee's monthly Social Security check will fall as a result of the Social Security cost-of-living adjustment (which is based on the whole benefit) being smaller than the SMI premium increase.

Under this option, all SMI enrollees would pay a little more, in contrast to proposals—such as increasing copayments—that could substantially increase the out-of-pocket costs of those who become seriously ill. This option need not affect enrollees with income below the poverty threshold because all of them are eligible to have Medicaid pay their Medicare premiums, although some who are eligible for Medicaid do not apply for benefits.

Low-income enrollees who are not eligible for Medicaid, however, could find the increased premium burdensome. A few might drop SMI coverage and either do without care or turn to sources of free or reduced-cost care, which could increase demands on local governments. In addition, states' expenditures would rise because states would pay part of the higher premium costs for Medicare enrollees who are also eligible for Medicaid.

**RELATE THE PREMIUM FOR PHYSICIANS' SERVICES
UNDER MEDICARE TO ENROLLEES' INCOMES**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Outlays	3,575	11,040	10,555	11,885	14,600	51,655

Instead of increasing the premium for all enrollees to cover 30 percent of costs under the Supplementary Medical Insurance (SMI) program, this option would collect more than 30 percent of per enrollee costs from higher-income people. For individuals with modified adjusted gross income less than \$25,000 and couples with income less than \$32,000, premiums would be set at 30 percent of SMI costs per enrollee. Premiums would rise progressively for higher-income enrollees, however, and would be set to cover 100 percent of per enrollee costs for individuals with income exceeding \$40,000 and for couples with income exceeding \$51,200. These premiums would be collected through the income tax system.

If this approach was carried out for 1992, and if no disenrollment from the SMI program resulted because of it, savings would total \$3,575 million in fiscal year 1992, and \$51.7 billion over the 1992-1996 period. Net outlays for SMI would be reduced by about 21 percent over this period. Under this option, the minimum premium for 1992 would increase from \$31.80 to \$38.00 a month, while the premium would increase to \$126.60 for those paying 100 percent of program costs. These estimates assume that the current hold-harmless provisions would continue only for those subject to the minimum 30 percent premium. (The hold-harmless provisions ensure that no enrollee's Social Security check would fall because an increase in the SMI premium exceeded the cost-of-living adjustment.)

This option would save substantially more than the previous option (570-11) that would increase the premium to 30 percent for all enrollees. Roughly 69 percent of enrollees would face the 30 percent premium, about 12 percent would pay the 100 percent premium, and 19 percent would pay a premium somewhere in between. This option need not affect enrollees with income below the poverty threshold because all of them are eligible to have Medicaid pay their Medicare premiums, although some who are eligible for Medicaid do not apply for benefits.

As before, low-income enrollees who are not eligible for Medicaid, however, could find even the 30 percent premium burdensome. In addition, some high-income enrollees subject to premiums that were at or near 100 percent of per enrollee program costs might disenroll. This would be especially likely for those (largely retired government employees) with retiree health benefit plans that do not require Medicare enrollment, although it might occur as well among some healthy enrollees without any other source of health insurance. Disenrollment among these enrollees would probably reduce SMI premium collections by more than SMI costs would fall, so that the effect on net outlays would be less favorable than shown above.

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Outlays	1,765	2,940	3,315	3,750	4,250	16,020

Currently, the coinsurance rate on most services provided under the Supplementary Medical Insurance (SMI) program is 20 percent. One exception to this is outpatient psychiatric services, for which the coinsurance rate is 50 percent. The other exceptions are clinical laboratory services and home health care, which have no coinsurance requirements.

If enrollees were required to pay coinsurance amounts equal to 25 percent on all services currently subject to a coinsurance rate of 20 percent, savings to Medicare would be \$1,765 million in fiscal year 1992. Over the 1992-1996 period, savings would total \$16.0 billion, reducing net SMI outlays by 6.6 percent.

This option would reduce Medicare's costs for two reasons. First, the higher coinsurance rate would reduce use of services by enrollees who do not have other insurance coverage to supplement Medicare. Second, Medicare would be responsible for a smaller share of the costs of the services enrollees use.

This option would increase the risk of very large out-of-pocket costs for the 20 percent of enrollees without any supplementary coverage, however, and would probably increase medigap premiums for the 30 percent of enrollees who purchase supplementary insurance for themselves. Moreover, it would increase state's Medicaid costs for the nearly 20 percent of enrollees who are eligible for full or qualified Medicaid benefits.

**COLLECT 20 PERCENT COINSURANCE ON CLINICAL
LABORATORY SERVICES UNDER MEDICARE**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Outlays	510	865	985	1,120	1,280	4,760

Medicare currently pays 100 percent of the approved fee for clinical laboratory services provided to enrollees. Medicare's payment is set by a fee schedule, and providers must accept that fee as full payment for the service. Beneficiaries pay coinsurance of 20 percent for most other services provided under Medicare's Supplementary Medical Insurance (SMI) program (as they did for clinical laboratory services before July 1984, when a fee schedule that reduced payment rates was put in place).

Reimposing the coinsurance requirement for laboratory services could yield appreciable savings to Medicare. If coinsurance of 20 percent of laboratory fees was imposed beginning January 1, 1992, federal savings would be \$510 million in fiscal year 1992. Savings would total \$4.8 billion over the 1992-1996 period, reducing net SMI outlays by about 2 percent.

In addition to reducing Medicare costs, this option would make cost-sharing requirements under the SMI program more uniform and therefore easier to understand. Moreover, enrollees might be somewhat less likely to have laboratory tests with little expected benefit if they paid part of the costs.

Cost-sharing probably would not affect enrollees' use of laboratory services substantially, however, because decisions about what tests are appropriate are generally left to physicians, whose decisions do not appear to depend on enrollees' cost-sharing. Hence, although a small part of the savings under this option might be the result of more prudent use of laboratory services, most of the expected savings would reflect the transfer to enrollees of costs now paid by Medicare. Further, billing costs for some providers, such as independent laboratories, could be greatly increased because they would have to bill both Medicare and enrollees to collect their full fees. Currently, they have no need to bill enrollees directly for clinical laboratory services.

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Outlays	1,400	2,000	2,200	2,450	2,700	10,800

Medicare's payment rates are generally increased on an annual basis. Currently, rates for inpatient hospital services reimbursed under the Prospective Payment System are scheduled to increase on October 1, 1991. Rates for physician and laboratory services and durable medical equipment are to go up on January 1, 1992.

In particular, Medicare's payments for the operating costs of inpatient hospital services are determined by a set of diagnosis-specific per-case rates. Separate rates apply to hospitals located in three types of areas: large urban areas (populations of more than one million), other urban areas, and rural areas. Under the Omnibus Budget Reconciliation Act of 1990 (OBRA-90), the urban update for fiscal year 1992 (which applies to rates for both types of urban areas) is estimated to be 2.4 percent, and the rural update is estimated to be 3.4 percent. The estimated average update in payments would be about 2.5 percent.

For physician services, a new Medicare fee schedule is to be put into place as of January 1, 1992, with rates designed to be budget neutral for 1991 and then updated for 1992. Under current law, in the absence of legislative action, the update for 1992 will be equal to the percentage increase in the Medicare Economic Index less 0.4 percentage points, with a further adjustment based on the difference between actual growth in spending for 1990 compared with the 9.1 percent target rate of growth. Under CBO's current projections, the estimated update for physicians' fees for 1992 is 1.2 percent. (Under the Administration's current projections, the estimated update is 2.2 percent.)

Payment rates for durable medical equipment and clinical laboratory services are normally updated by the Consumer Price Index (CPI). Under OBRA-90, however, the 1992 update for durable medical equipment is set at one percentage point less than the CPI, so the estimated increase for 1992 is 2.5 percent. For clinical laboratory services, OBRA-90 requires the 1992 update to be 2 percent.

Medicare could, instead, freeze the rates for these services at 1991 levels by setting all these updates to zero. This one-year freeze would save \$1.4 billion in 1992, and \$10.8 billion over the 1992-1996 period. The majority of the savings—about \$1.2 billion in 1992—would come from the freeze in hospital rates.

The freeze would reduce total Medicare expenditures by 1.1 percent in 1992, and 1.4 percent over the 1992 through 1996 period, relative to current law. The reduction in payments might, however, be difficult for some providers to absorb. As a result, access to services or the quality of services might be adversely affected for some Medicare beneficiaries.

570-16 **TAX A PORTION OF THE INSURANCE VALUE
OF MEDICARE BENEFITS**

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Without Income Threshold	1.2	4.0	4.4	4.8	5.2	19.6
With Income Threshold	0.5	1.8	2.1	2.3	2.6	9.4

SOURCE: Joint Committee on Taxation.

Eligibility for Hospital Insurance (HI) benefits is based on working-year tax contributions, half of which are paid by employees from after-tax income and half by employers from pretax income. Hence, 50 percent of the insurance value of HI benefits might be treated as taxable income for all Medicare enrollees, reflecting the portion of contributions that was not originally subject to the income tax. This proposal is analogous to taxing part of Social Security benefits, which is already in effect for higher-income beneficiaries whose modified adjusted gross income plus half of Social Security benefits exceeds \$25,000 (for individuals) or \$32,000 (for couples).

If no income thresholds were used to limit the application of the tax on HI benefits, additional revenues would be \$1.2 billion in 1992 and \$19.6 billion over the 1992-1996 period. Alternatively, the current income thresholds for the tax on Social Security benefits could be used to limit the application of the tax on HI benefits. In this case, 50 percent of the HI insurance value would be added to modified adjusted gross income plus half of Social Security benefits to compare with the threshold. Taxing HI benefits would then yield additional revenues of \$0.5 billion in 1992 and \$9.4 billion over the five-year period.

A tax on HI benefits would reduce the federal deficit and strengthen the HI trust fund if the proceeds were placed there. If income thresholds were used, low- and middle-income enrollees would not be liable for the tax. In fact, fewer than half of enrolled tax units in 1992 would be affected by this proposal even if no income thresholds were used. Furthermore, since this option would use the mechanism already in place for taxing Social Security benefits, it would present no additional administrative difficulty.

Unlike the tax on Social Security benefits, however, this tax would be imposed on the insurance value of in-kind benefits rather than on the dollar benefits actually received, thereby modifying current tax policy. (There would be little to recommend basing the tax on actual benefits received because it would then be directly related to enrollees' health care costs. Such a tax would reduce the insurance protection Medicare is intended to provide.) Some might object to this option unless enrollees

could alter their tax liability by renouncing all benefits under the HI program, an option that might be particularly important to enrollees for whom Medicare is a secondary payer to their employment-based coverage. For the approximately 10 percent of enrollees in or above the 28 percent tax bracket, the additional tax liability would be substantial--\$325 in 1992 for individuals and \$650 for couples in the 28 percent tax bracket.

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Budget Authority	290	820	890	970	1,050	4,050
Outlays	260	740	880	960	1,050	3,900

Federal child nutrition programs were developed to improve the health and well-being of children by providing them with nutritious meals. The programs provide cash and commodity assistance to schools, child care centers, and family day care homes that serve meals to children.

Although most of the funds are targeted toward low-income children, some of the aid benefits middle- and upper-income children as well. For example, in the National School Lunch Program (the largest of the child nutrition programs), most schools receive \$1.61 in cash reimbursement for each meal served to children from households with incomes at or below 130 percent of the poverty line; a smaller subsidy of \$1.21 for each meal served to children from households with incomes between 130 percent and 185 percent of poverty; and a subsidy of 16 cents per meal for children with household incomes above 185 percent of poverty. Schools are also given approximately 14 cents' worth of commodities for each lunch served, regardless of the household income of the child. Comparable reimbursement structures are used in the School Breakfast Program and in the portion of the Child Care Feeding Program devoted to child care centers.

This option, which was included in the Administration's budgetary proposals for fiscal year 1991, would make three changes: Cash and commodity subsidies for school lunches served to children with incomes above 350 percent of the poverty level would be eliminated. Subsidies for lunches served to children from families with incomes above 185 percent of the poverty level in family day care homes would be made comparable to those in child care centers, resulting in an estimated 24 cent subsidy per lunch. Lunch subsidies for children from families with incomes between 130 percent and 185 percent of the poverty level would be increased by 20 cents.

Together, these changes would reduce federal expenditures by about \$3.9 billion during the 1992-1996 period. Eliminating the cash and commodity subsidies for all lunches served to children from households with incomes above 350 percent of the poverty line (\$46,900 per year for a family of four in 1991) would reduce federal expenditures by \$65 million in 1992, by \$570 million in 1993, and by \$2.7 billion during the 1992-1996 period. (These estimates assume that the changes would be effective on July 1, 1992, except for the change in subsidies to family day care homes, which would have an October 1, 1991, effective date.) Reducing the subsidies for the

children in family day care homes would reduce federal expenditures by \$200 million in 1992, and by \$1.6 billion during the 1992-1996 period. The higher subsidies called for in the third part of the option would increase federal expenditures by \$420 million during the five-year period.

In these estimates, CBO assumes that the reduction in federal subsidies would lead some schools to discontinue the program for all students. The savings resulting from schools dropping out of the program are relatively small (\$240 million over five years), since the schools most likely to drop out are those serving relatively few meals to children from families with lower incomes.

Although most of the federal funds are targeted toward low-income children, 22 percent of the children who participated in the school lunch program have household incomes above 350 percent of the poverty line and 71 percent of the participating children in family day care homes have household incomes above 185 percent of the poverty line. These children are less in need of federal subsidies, and the targeting of this assistance would be improved by limiting it to those from households with the lowest incomes. Increases in the subsidies for meals served to children in households with incomes in the 130 percent to 185 percent of poverty range would, in effect, redistribute some of the child nutrition subsidies from higher-income students to this group.

Such changes would probably result in lower participation among nonpoor children because participation falls when prices are raised. Participating schools and child care centers would probably increase the price charged to nonpoor children to make up the loss in reimbursements unless state and local governments provided additional support. Children who dropped out of the program could receive meals of lower quality, since the meals qualifying for reimbursement are nutritionally adequate, while those from alternative sources might not be. Moreover, if the decline in participation were substantial, low-income children could become the main recipients of the meals and thus would be identifiable as poor by their peers. Finally, some schools and child care centers where nonpoor children provide a large share of the total revenue for the meal program would probably drop out when participation fell, thereby eliminating federally subsidized meals for some low-income children.

**IMPOSE A FEE FOR FEDERAL ADMINISTRATION OF SSI
STATE SUPPLEMENTARY PAYMENTS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Budget Authority	70	140	220	230	240	900
Outlays	70	140	220	230	240	900

The Supplemental Security Income (SSI) program provides federally funded monthly cash payments based on uniform, nationwide eligibility rules to needy aged, blind, or severely disabled persons. Established by the 1972 amendments to the Social Security Act and begun in 1974, SSI replaced the federal-state programs for Old-Age Assistance, Aid to the Blind, and Aid to the Permanently and Totally Disabled. The maximum federal payment is \$407 per month for an individual and \$610 per month for a couple. States may supplement the federal payment and choose to have the Social Security Administration (SSA) administer these supplements. SSA administers the state supplementation programs for 17 states and the District of Columbia at no charge.

This option would require states to pay a fee to the SSA if they elect to have their state supplementary payments federally administered. The fees would be phased in over three years, reaching 5 percent of the amount of a state's supplementary payments in 1994. CBO estimates that the SSA would collect \$70 million in fees in 1992 and \$240 million in 1996. Over two-thirds of the monies would be collected from California.

Imposing an administrative fee would reimburse the federal government for a service it is providing to some states. If these states determined that they could administer their supplements at a lower cost, they would be free to do so.

The increase in cost the states would incur could, however, discourage some of them from supplementing the federal SSI payments or could result in smaller amounts being provided. Opponents also note that the federal payments alone are insufficient to raise the incomes of SSI recipients to the poverty line. State supplementation helps fill the gap and, they argue, the federal government should encourage such supplementation.

600-3 DEFER OR CAP COST-OF-LIVING ADJUSTMENTS
FOR FEDERAL RETIREES UNDER AGE 62

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
	Defer COLAs					
Military Retirement	460	980	1,500	2,100	2,700	7,740
Civilian Retirement	120	200	260	300	330	1,210
Total Outlays	580	1,180	1,760	2,400	3,030	8,950
	Cap COLAs to CPI Increase Minus One Percentage Point					
Military Retirement	100	230	380	550	730	1,990
Civilian Retirement	20	50	70	80	90	310
Total Outlays	120	280	450	630	820	2,300

Currently, about 4.9 million employees are covered by federal civilian and military retirement programs. In 1992, costs for beneficiaries will total nearly \$60 billion. The Federal Employees' Retirement System (FERS) covers employees hired since January 1984 and others who elected to join. Most civilian employees not covered by FERS receive coverage under its predecessor, the Civil Service Retirement System (CSRS). Uniformed military personnel receive coverage under the Military Retirement System (MRS). This system was last revised for personnel entering military service after August 1, 1986.

About 1 million annuitants (including 53 percent of those under MRS and 10 percent of those under CSRS) are nondisabled retirees under age 62. Currently the government provides this relatively young group of retirees with full cost-of-living adjustments (COLAs). This protection is expensive relative to adjustments available under the largest and most generous private pension plans. Continuing such protection will generate cumulative outlays of \$8.9 billion through 1996.

Deferring COLAs for nondisabled retirees until age 62, or capping them beforehand at the inflation rate less one percentage point (CPI minus one), would reduce five-year outlays by \$8.9 billion and \$2.3 billion, respectively. Each of these options would grant, for CSRS and MRS covered retirees, a catch-up raise at age 62 to adjust for inflation since retirement. Full COLAs would be provided after age 62. (Although the catch-up adjustment restores the monthly pension to what it would otherwise have been at age 62, the annuitant is never compensated for the smaller benefit payments received during the period COLAs were either eliminated or

capped.) Nearly 90 percent of the losses would be taken by current retirees and the rest by those retiring in the next five years. Exempting current civilian and military retirees would shrink five-year savings for the deferral option to about \$1.2 billion and for the cap option to only about \$0.3 billion.

Alignment with practices representative of private employers is a long-standing objective of federal personnel policy.¹ Federal salaries will be gradually updated under the Federal Employees Compensation Act of 1990. In this context, deferring or capping pre-age-62 retirement COLAs would further the objective of comparability by producing a mix of current and deferred compensation more closely aligned with private-sector practice. The COLA caps or deferrals could also assist with another objective of pay reform--to improve the ability of government to retain workers--as some current employees would opt to delay retirement plans. Moreover, deferring or capping pre-age-62 COLAs would moderate the government's cost for early retirement, an objective of the recent reforms in the federal retirement systems. The CPI minus one option is consistent with the post-reform MRS system. COLAs for retirees covered by FERS do not begin until age 62 and no catch up is provided.

Under the revised COLA provisions, federal retirees would still receive benefits that exceed those typically received by employees retiring from private firms. But persons already retired or near retirement age view their relatively generous pensions as fair recompense for working long years at below-market federal salaries.

Extending COLA cuts to military retirees would also meet with criticism. Certain cuts may lead some military personnel to delay retirement--a response that would hinder current efforts to reduce the size of the military. Conversely, changing the rules of retirement could cause significant hardships for some military personnel who would continue to retire at a relatively young age. (MRS employees retire at an average age of 43.) Many retirees targeted by this option, however, should be in a position to supplement their pensions by working--as most military retirees do. In the event that the Congress excluded military personnel from the COLA change, less than a fifth of the potential savings would remain. In pursuing closer alignment with private-sector practices, the Congress may also want to consider internal equity objectives and thus adopt the measure for all federal workers. (Both options would cover certain federal workers, such as Foreign Service officers, Coast Guard personnel, and other employees under separate retirement systems similar to CSRS and MRS.)

1. Alignment with private-sector practice has not been the only policy standard for federal compensation. In the past, generous retirement benefits have been maintained as an incentive for keeping an experienced corps of career employees. Reforms in the last two decades have moderated certain benefit provisions, especially for new employees, while keeping a retirement package that competes with the best private-sector plans.

RESTRICT COST-OF-LIVING ADJUSTMENTS IN NON-MEANS-TESTED BENEFIT PROGRAMS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Eliminate COLAs for One Year						
Social Security/ Railroad Retirement	9,950	13,600	13,600	13,450	13,000	63,600
Other Non-Means- Tested Programs	2,500	3,400	3,550	3,600	3,650	16,650
Offsets in Means- Tested Programs and Medicare Premiums	-350	-480	-490	-510	-520	-2,340
Total Outlays	12,100	16,500	16,650	16,500	16,150	77,900
Delay COLAs for Three Months						
Social Security/ Railroad Retirement	3,300	2,600	2,800	2,950	3,100	14,750
Other Non-Means- Tested Programs	840	650	700	740	770	3,700
Offsets in Means- Tested Programs and Medicare Premiums	-120	-90	-100	-110	-330	-750
Total Outlays	4,050	3,150	3,400	3,600	3,550	17,700
Delay COLAs for Six Months						
Social Security/ Railroad Retirement	6,650	5,150	5,600	5,900	6,200	29,500
Other Non-Means- Tested Programs	1,700	1,300	1,400	1,500	1,550	7,400
Offsets in Means- Tested Programs and Medicare Premiums	-230	-180	-200	-210	-670	-1,500
Total Outlays	8,100	6,300	6,800	7,150	7,100	35,400

**Limit COLAs to the CPI Increase Minus
Two Percentage Points for Five Years**

Social Security/ Railroad Retirement	4,150	10,000	16,100	22,300	28,600	81,200
Other Non-Means- Tested Programs	1,050	2,500	4,100	5,700	7,300	20,700
Offsets in Means- Tested Programs and Medicare Premiums	-150	-350	-580	-810	-1,350	-3,250
Total Outlays	5,050	12,150	19,650	27,200	34,550	98,600

**Pay the Full COLA on Benefits Below a Certain Level
and 50 Percent of the COLA on Benefits Exceeding
That Level for Five Years**

Social Security/ Railroad Retirement	0	870	2,100	3,350	4,600	10,900
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Under current policies, outlays for Social Security and other non-means-tested cash transfer programs whose benefits are indexed to the Consumer Price Index (CPI) are expected to total \$360 billion in 1992 and to rise to \$440 billion by 1996. Reducing the automatic cost-of-living adjustment (COLA) for these programs is commonly proposed as one way to slow the growth in entitlement spending. Five strategies for reducing COLAs and the savings in outlays resulting from each are shown in the preceding table. The programs in which COLAs would be reduced under the first four options are: Social Security Old-Age, Survivors, and Disability Insurance (OASDI); Railroad Retirement; Civil Service Retirement; Military Retirement; Federal Employees Workers' Compensation; Veterans' Compensation; and retirement benefits for the Foreign Service, the Public Health Service, and the Coast Guard. The fifth option would affect only Social Security and Railroad Retirement Tier I COLAs. (Other options for achieving savings in Social Security are given in 650-2, 650-3, and 650-4.)

COLA restrictions could achieve considerable savings by making small reductions in benefits for a large number of people, in contrast with other budget options that would impose large reductions in benefits on smaller groups of recipients. Moreover, limiting these options to the non-means-tested cash benefit programs would protect many of the poorest beneficiaries of entitlements--for example, recipients of Supplemental Security Income--from losses of income. Finally, because the benefit levels would be permanently lowered for those eligible when the COLA limitation was established, significant reductions in outlays would persist beyond the five-year projection period. The savings would eventually disappear, however, as

beneficiaries died or stopped receiving payments for other reasons, unless the COLA limitation was accompanied by a permanent reduction in the initial benefits of newly eligible workers as well (see 650-3).

Budget reduction strategies that institute less-than-complete price indexing would, however, result in financial difficulties for some recipients--particularly if COLAs were restricted for an extended period. Restrictions on COLAs also encounter opposition from those who fear that changes made to reduce budget deficits would undermine the entire structure of retirement income policy. For example, because private pension plans generally do not offer complete indexing, restricting Social Security COLAs would further reduce protection for these beneficiaries against inflation. Some people also think that, because Social Security and other retirement programs represent long-term commitments to both current retirees and today's workers, these programs should be altered only gradually and then only for programmatic reasons. According to this view, changes in benefits should be announced well in advance to allow people to adjust their long-run plans.

Unless restrictions on COLAs were accompanied by commensurate changes in initial benefit amounts of new recipients, disparities in benefit levels would develop among different cohorts of retirees. This situation is particularly relevant for Social Security, where benefits for newly eligible individuals are based on an indexed benefit formula and on indexed earnings histories. For example, if prices rose by 4 percent in a year and the wage index used to compute benefits for newly eligible recipients increased by 5 percent, eliminating that year's COLA without any change in the calculation of initial benefits would result in benefits for new beneficiaries that were about 5 percent higher than for recent retirees; under current law, benefits would be only about 1 percent higher for the new retirees. To mitigate this effect and to achieve additional savings, efforts to slow the growth in benefits through COLA limitations might be extended to the formulas for determining initial benefits (see 650-3).

Several options that would restrict COLAs for current beneficiaries are examined below. Except for the option to limit COLAs to two percentage points less than the increase in the CPI, the magnitude of the savings in each case--as well as the impact on beneficiaries--would be very sensitive to the level of inflation in the years in which the COLAs would be reduced. If prices were to rise faster than currently assumed, savings would be greater than shown and recipients would bear larger costs. If prices were to rise less quickly, both budgetary savings and the effect on recipients would be smaller.

The following sections describe the savings from the specific versions of COLA restrictions and discuss any effects unique to them.

Eliminate COLAs for One Year. One option would be to eliminate COLAs in fiscal year 1992 for non-means-tested benefit programs, while allowing them to be paid in subsequent years, but with no provision for making up the lost adjustment. If this approach were taken, federal outlays would be reduced by about \$12.1 billion in 1992

and \$77.9 billion over five years, with Social Security and Railroad Retirement accounting for most of the total.

Delay COLAs for Three or Six Months. Instead of complete elimination for one year, COLAs could be delayed for three or six months. In most federal cash benefit programs, COLAs are made effective in January of each year to compensate recipients for losses in the purchasing power of their benefits as a result of rising prices. Social Security is the largest of these non-means-tested programs, accounting for more than three-quarters of the total increase from COLAs.

Delaying COLAs by three months would reduce outlays by about \$4.0 billion in 1992 and \$17.7 billion during the 1992-1996 period. Delaying COLAs by six months would reduce outlays by about \$8.1 billion in 1992 and \$35.4 billion over five years. These estimates assume that the COLA delays in Social Security would be accompanied by a comparable delay in the Supplementary Medical Insurance (SMI) premium increase in 1996. They also assume that a delay in the payment of COLAs would be carried out without affecting the annual increase in the Social Security maximum taxable wage base and that new cohorts of beneficiaries would be ineligible to receive a COLA effective in their first year of eligibility.

Limit COLAs to the CPI Increase Minus Two Percentage Points for Five Years. Another approach would be to reduce the adjustment by a fixed number of percentage points--for example, set the adjustment at the CPI increase less two percentage points. Unlike other options to restrict COLAs, both savings and effects on beneficiaries would be roughly the same regardless of the level of inflation--about \$98.6 billion over the next five years, if extended for the full period. This approach would be cumulative, however, and would therefore significantly reduce the real incomes of beneficiaries at the same time that the ability of many to supplement their incomes by working was declining.

Pay the Full COLA on Benefits Below a Certain Level and 50 Percent of the COLA on Benefits Exceeding That Level for Five Years. Another alternative would tie the COLA reductions to beneficiaries' payment levels. The example discussed here--based only on Social Security and Railroad Retirement Tier I benefits--would award the full COLA for benefits based on the first \$525 of a retiree's monthly Primary Insurance Amount (PIA) and 50 percent of the COLA on benefits above this level. The \$525 per month threshold is about equal to the 1991 poverty threshold for an elderly person and would be indexed to maintain its value over time. The estimates here assume that the Social Security Administration would be unable to put this option in place in time to affect the January 1992 COLA, but that the option would be in place in time to affect the January 1993 COLA.

This approach would save about \$10.9 billion over the 1992-1996 period, but no savings would occur in 1992. For comparison with other options--which could be carried out earlier--the 1992-1996 budget savings would be \$17.5 billion if this option were effective for the January 1992 COLA.

Because the full COLA would be paid to beneficiaries with low PIAs, this option would ensure that recipients with relatively low incomes would not be adversely affected. Moreover, its percentage impact would be greater for recipients with higher benefits. Nonetheless, benefit levels are not always good indicators of total income. Some families with high benefits have very little other income, while some with low benefits have substantial income from other sources. Furthermore, many people object to any changes in retirement programs that might be construed as a means test for benefits, even if the test was limited only to the COLA.

A variation would extend this approach to include the other non-means-tested benefit programs; this variation is not shown in the table. Such an option would spread the effects among a wider group of recipients, although it might be somewhat more complicated to design because the different benefit structure in each program could require separate determinations of the appropriate benefit levels on which to pay reduced COLAs.

Eliminating COLAs for recipients whose benefits are based on PIAs above a certain level is another approach. Because this option would eliminate the entire COLA, rather than just the portion of it for benefits above the threshold level, both the savings and the impacts on beneficiaries would be considerably greater. Moreover, unless adjustments were made at the threshold, recipients with benefits just below the threshold could be made better off than those with benefits just above the threshold. Still another approach that would address some of the administrative problems of these two options would involve increased taxation of Social Security benefits (see REV-15).

650-2 ELIMINATE COMPOUNDING OF COST-OF-LIVING
ADJUSTMENTS IN NON-MEANS-TESTED PROGRAMS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Outlays	0	370	1,050	1,900	3,050	6,350

This option would require that annual cost-of-living adjustments (COLAs) in non-means-tested cash benefit programs be calculated on the basis of individuals' initial benefits, without regard to any other COLAs received previously. These programs include: Social Security Old-Age, Survivors, and Disability Insurance (OASDI); Railroad Retirement, Civil Service Retirement; Military Retirement; Federal Employees Workers' Compensation; Veterans' Compensation; and retirement benefits for the Foreign Service, the Public Health Service, and the Coast Guard. This option would not reduce outlays for these programs in 1992, but would achieve savings of \$6.3 billion over the 1992-1996 period.

Basing COLAs on initial benefit amounts only would mean eliminating the compounding of increases. For example, a person initially entitled to a monthly cash benefit of \$500 would, after five consecutive COLAs of 5.0 percent, receive a benefit of \$625, not \$638 as would be the case if compounding were continued.

As with other options that would affect the way in which cost-of-living adjustments are calculated (see 650-1), this option would achieve savings by exacting small reductions in benefits from a large number of people. Moreover, limiting this option to the non-means-tested cash benefit programs would protect many of the poorest beneficiaries of entitlements--for example, recipients of Supplemental Security Income--from losses of income. Finally, significant reductions in outlays would persist beyond the five-year projection period.

Budget reduction strategies that institute less than complete price indexing would, however, result in financial difficulties for some recipients. The reduction in the real value of benefits under this option would increase the longer a recipient lived and would therefore have its greatest impact on elderly widows.

**REDUCE THE REPLACEMENT RATE WITHIN EACH
BRACKET OF THE SOCIAL SECURITY BENEFIT FORMULA**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Outlays	135	580	1,180	1,910	2,850	6,650

Under current law, the basic Social Security benefit is determined by a formula that provides retired workers with 90 percent of their Average Indexed Monthly Earnings (AIME) up to the first "bend point" (which defines the first earnings bracket), plus 32 percent of the AIME in the second bracket, plus 15 percent of the AIME above the second bend point. One method of reducing initial Social Security benefits would be to lower these three rates by a uniform percentage.

Lowering the three rates in the benefit formula from 90, 32, and 15 to 85.5, 30.4, and 14.2, respectively, would achieve an essentially uniform 5 percent reduction in the benefits of newly eligible workers starting in 1992. Thus, a 62-year-old retiree who had always earned the average wage would receive initial benefits in 1992 of about 33.0 percent of preretirement earnings, compared with 34.8 percent if no change were made.

This reduction in the replacement rates would lower Social Security outlays by about \$6.7 billion over the 1992-1996 period and by more in later years. Moreover, this option would reduce the benefits of all future retirees by essentially the same proportion, thereby generating substantial budgetary savings by having relatively small impacts on a large number of beneficiaries. To ensure that benefits for both current and future recipients would be reduced to a similar extent, the option could be combined with a cut in the cost-of-living adjustment (see 650-1). The combination would generate substantial budgetary savings, while having roughly the same impact on all current and future beneficiaries.

Some people contend that the Social Security Amendments of 1983 have already sharply reduced the benefits of future retirees and that further reductions would be unfair. In particular, the age at which unreduced Social Security retirement benefits are first available will rise in stages from 65 to 67 for workers turning age 62 between the years 2000 and 2022. As a consequence, benefits for workers retiring after the turn of the century will be less than what would have been received had the full retirement age not been increased. For example, a worker who retires at age 62 in 2022 will receive 70 percent of the Primary Insurance Amount, compared with 80 percent for a worker who retires at age 62 in 1992.

An alternative method of reducing Social Security benefits would leave replacement rates unchanged but narrow the AIME brackets over which those rates apply, perhaps by reducing the pace at which the brackets are indexed for inflation. This approach could exempt beneficiaries with the lowest AIMEs from the cut, but would impose benefit reductions unevenly among other recipients.

**LENGTHEN THE SOCIAL SECURITY BENEFIT
COMPUTATION PERIOD BY THREE YEARS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1992	1993	1994	1995	1996	
Outlays	25	120	310	590	900	1,950

Social Security retirement benefits are based on the Average Indexed Monthly Earnings (AIME) of workers in employment covered by the system. People who turn age 62 in 1991 or later must count 35 years to determine their AIME. Lengthening the averaging period would generally lower benefits slightly, by requiring more years of lower earnings to be factored into the benefit computation. This option would phase in an increase in the AIME computation period until it reached 38 years for people turning age 62 in 1995 or beyond. This approach would save \$1.9 billion over the next five years and more in later years.

One argument for a longer computation period is that people are now living longer and the normal retirement age for the Social Security program will be raised beginning in the year 2000. Using more years to calculate the AIME would also lower Social Security outlays and would reduce incentives for early retirement. In addition, lengthening the averaging period would reduce the advantage that workers who postpone entering the labor force have over those who get jobs at younger ages. Because many years of low or no earnings can be ignored in calculating AIME, the former group currently experiences little or no loss of benefits for their additional years spent not working and thus not paying Social Security taxes.

Because some beneficiaries elect early retirement for such reasons as poor health or unemployment, an argument against this proposal is that a longer computation period would reduce benefits for recipients who are least able to continue working. Other workers who would be disproportionately affected include those with significant periods outside the Social Security system, such as parents--usually women--who interrupted their careers to rear children, and workers who experienced long periods of unemployment or employment not covered by Social Security.

PART II REVENUE OPTIONS

REV-01 RAISE MARGINAL TAX RATES FOR
INDIVIDUALS AND CORPORATIONS

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Individuals						
Raise Marginal Tax Rates to 16 Percent, 30 Percent, and 33 Percent	17.4	32.9	35.4	38.2	41.1	164.9
Add a 5 Percent Surtax	13.4	25.5	27.5	29.7	32.1	128.3
Raise the Top Marginal Tax Rates to 30 Percent and 33 Percent	8.6	16.2	17.6	19.3	20.9	82.6
Raise the Top Marginal Tax Rate to 33 Percent	3.4	6.3	6.6	7.0	7.3	30.5
Raise the Top Marginal Tax Rate to 33 Percent and Add a 38 Percent Bracket	10.2	18.7	19.2	20.0	20.6	88.7
Corporations						
Raise the Top Marginal Tax Rate to 35 Percent	1.5	2.5	2.5	2.5	2.6	11.4
Add a 5 Percent Surtax	3.0	5.2	5.3	5.3	5.4	24.2

SOURCE: Joint Committee on Taxation.

Rate increases have several advantages over other tax changes as a means for raising revenue. First, they do not increase the complexity of the tax code or the record-keeping requirements of taxpayers. Second, the Treasury begins to receive the additional revenues relatively quickly because rate increases are reflected in withholding and estimated tax schedules. But rate increases have drawbacks as well.

Higher tax rates reduce incentives to work and save, and worsen any inefficiencies associated with remaining preferences in the income tax code.

Individuals. Under current law, the income tax structure has three explicit marginal tax rates--15 percent, 28 percent, and 31 percent, with the marginal tax rate on capital gains limited to 28 percent. (The marginal tax rate is the percentage of an extra dollar of income that a taxpayer must pay in taxes.) Some taxpayers face effective marginal tax rates higher than 31 percent because personal exemptions are phased out and itemized deductions are limited for high-income taxpayers. The Omnibus Budget Reconciliation Act of 1990 provides that couples with adjusted gross income (AGI) in excess of \$150,000, single filers with AGI in excess of \$100,000, and heads of households with AGI in excess of \$125,000, will lose 2 percent of the total amount of personal exemptions for each \$2,500 of AGI in excess of the thresholds. The thresholds will be indexed for inflation starting in 1992. For taxpayers in the 31 percent bracket with AGI above the threshold (but not more than \$122,500 above the threshold), this provision adds about half a percentage point per exemption to their marginal tax rate. OBRA also provides that itemized deductions be reduced by 3 percent of AGI in excess of \$100,000. The same threshold applies to all taxpayers and also is indexed for inflation. This provision raises the marginal tax rate for taxpayers in the 31 percent bracket by 0.93 percentage points. Until 1996 when both these provisions expire, a couple with two children could have an effective marginal tax rate over 34 percent.

Increasing all marginal tax rates for individuals by approximately the same percentage--to 16 percent, 30 percent, and 33 percent--would increase revenues by a large amount: about \$165 billion in 1992 through 1996. All of the options that change the rate schedules assume that the maximum rate on capital gains would remain at 28 percent. Increasing all marginal tax rates by the same percentage is roughly equivalent to imposing a surtax on regular tax liability before credits. Although taxes would increase proportionately for most taxpayers under this option, there would be exceptions--for example, taxpayers with capital gains currently taxed at 28 percent. The option would not increase taxes for those whose taxes are computed according to the alternative minimum tax, unless that tax rate were also increased (see REV-03), while families with tax credits would face a somewhat larger percentage increase in their tax liabilities than other taxpayers. Some families whose Earned Income Credit (EIC) gives them a zero tax liability or an EIC refund could incur a positive tax liability as the result of this option.

An alternative to a rate increase would be to impose a surtax applied to tax liability after credits. A surtax would have a different effect than raising an equivalent amount of revenues with higher marginal tax rates. Under a surtax, higher taxes would be paid by all taxpayers who now face a positive tax liability, even those who pay the alternative minimum tax, but those whose tax liability was exactly offset by tax credits under current law would have no additional tax liability. Recipients of EIC refunds would also not be affected by this form of a surtax. A surtax would increase taxes paid on capital gains. A 5 percent surtax applied to tax liability after credits would increase revenues by about \$128 billion in 1992 through 1996.

Another option is to increase only the top two marginal tax rates. Increasing the current 28 percent rate to 30 percent and the 31 percent rate to 33 percent would raise revenues by about \$83 billion in 1992 through 1996. For 1992, this option would increase taxes for married couples with taxable incomes over \$35,800 and single filers with taxable income over \$21,450.

Two remaining individual income tax options would affect only those taxpayers who are in the 31 percent bracket under current law--less than 4 percent of all taxpayers. The first option would raise the tax rate in the highest bracket from 31 percent to 33 percent. In 1992 this provision would affect couples with taxable income over \$86,550 and single filers with taxable income over \$51,950. The second option would also raise the 31 percent tax rate to 33 percent, and would create a new 38 percent bracket for couples with taxable incomes in excess of \$125,000 and singles with taxable incomes above \$75,000. About 1.5 million taxpayers would be in the new 38 percent bracket. Raising the 31 percent tax rate to 33 percent would increase revenues by about \$30 billion dollars in 1992 through 1996. Raising the 31 percent tax rate to 33 percent and creating a new 38 percent bracket would increase revenues by about \$89 billion over the same period.

Corporations. The top statutory tax rate on corporate income is 34 percent. Lower marginal rates apply to the first \$75,000 of taxable income, but corporations with taxable income between \$100,000 and \$335,000 pay an additional 5 percent surtax in order to phase out the benefits of the lower marginal rates.

About \$11 billion could be raised in 1992 through 1996 by increasing the top marginal rate to 35 percent. While only 10 percent of corporate taxpayers pay the top rate, these firms earn approximately 90 percent of all corporate taxable income. Corporations that continue to pay the alternative minimum tax would be unaffected by the change, and those with unused credits could offset some of the tax increase.

An alternative to raising the top corporate rate would be to impose a surtax on tax liabilities after credits. A 2.4 percent surtax would raise about the same revenues as an increase in the top rate to 35 percent; under this surtax, the top rate would be 34.8 percent. A 5 percent surtax would raise about \$24 billion in 1992 through 1996. In contrast to a rate increase, a surtax would apply to corporate liabilities from the alternative minimum tax, and it would not expand the amount of credits that corporations could claim.

Changing the top corporate and individual rates, either directly or through a surtax, would affect the decision a business makes about its form of organization. Under current law, the individual income tax rate for most filers is below the corporate rate. Furthermore, income earned by businesses organized as corporations is taxed at both the corporate and individual levels. Income earned by noncorporate businesses is taxed only at the individual level. As a result, there is a tax incentive for businesses to choose a noncorporate form of organization. Changes in the differential between the corporate and individual rates would affect this incentive.

**AMEND OR REPEAL INDEXING
OF INCOME TAX SCHEDULES**

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Delay Indexing Until 1993 (except for EIC)	8.1	13.9	14.0	15.2	16.6	67.8
Repeal Indexing (except for EIC)	8.1	19.9	31.4	45.2	60.7	165.3

SOURCE: Joint Committee on Taxation.

Under current law, the personal exemption, the standard deduction, the minimum and maximum dollar amounts for each tax rate bracket, the thresholds for the phaseout of personal exemptions and the limit on itemized deductions, and the earned income credit (EIC) are indexed annually to offset the effects of inflation. Without indexing, the bracket creep caused by inflation would gradually raise the average tax rate paid by most taxpayers.

Repealing indexing beginning with the adjustment scheduled for 1992 (except for the EIC) would raise revenues by about \$165 billion in 1992 through 1996, if the annual rate of inflation were to average 4.0 percent over the period as projected. Revenues from the repeal would grow rapidly as the cumulative effects of inflation drove up the consumer price index. Although eliminating indexing only for 1992 would raise the same amount of revenues in the first year, it would raise much less in later years—about \$68 billion over the five-year budget period.

Repealing or suspending indexing would not burden all taxpayers equally. Among families with the same income, taxpayers who itemize would generally bear a smaller tax increase than those who use the standard deductions, and families with children would be affected more than families without children if the personal exemption were not indexed. Low-income families would have a much smaller percentage drop in after-tax income than other families, but the percentage cut would be equally small for families with the highest incomes. Because the additional tax burden from repealing or suspending indexing would not be shared equally, some argue that a surtax or a general rate increase would be preferable (REV-01).

Another argument for retaining indexing is that it requires the Congress to decide explicitly on tax increases. Without indexing, inflation causes many taxpayers to move into higher tax brackets, so that tax liabilities increase at a faster pace than income. This results in an increase in real tax liabilities without legislative action, even for taxpayers whose real income has not increased.

REV-03 INCREASE THE ALTERNATIVE
MINIMUM TAX RATE

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Individuals						
Raise AMT Rate to 28 Percent	0.9	4.9	4.8	5.0	5.3	20.9
Corporations						
Raise AMT Rate to 25 Percent	2.3	3.4	2.7	1.9	1.2	11.6

SOURCE: Joint Committee on Taxation.

The alternative minimum tax (AMT) limits taxpayers' use of tax preferences to reduce their tax liability. Increasing the AMT rate would raise revenues from the individuals and corporations that benefit the most from tax preferences. Revenue gains from these rate increases are somewhat uncertain, however, because taxpayers can avoid the AMT to some extent by careful tax planning.

Raise the Individual AMT Rate to 28 Percent. The AMT for individuals is 24 percent of alternative taxable income in excess of the exemption amount--\$40,000 for a joint return or \$30,000 for a single return. The AMT rate was raised from 21 percent to 24 percent by the Omnibus Budget Reconciliation Act of 1990. The exemption is phased out for high-income taxpayers. Some adjustments and deductions that are allowed in computing regular taxable income are disallowed when computing taxable income for the alternative tax. These adjustments are of two types: deferral preferences, such as accelerated depreciation, excess intangible drilling costs, and profit or loss from long-term contracts; and exclusion preferences, such as the charitable deduction for appreciated property, itemized deductions of state and local taxes, some tax-exempt interest, percentage depletion, and miscellaneous itemized deductions.

Taxpayers must pay the larger of the regular tax or the AMT. To the extent that the individual AMT results from deferral preferences, one year's AMT can be credited against future years' regular tax liability. Thus, a portion of the revenue gain from a higher AMT rate results from a shift of some future tax liabilities to earlier years.

Increasing the AMT rate to 28 percent would raise about \$21 billion in 1992 through 1996. Some preferences in the tax code are designed to encourage certain kinds of behavior, but taxpayers who pay the AMT are denied the full benefit of these preferences. Raising the AMT rate would further reduce these incentives by reducing the maximum combined tax benefit from these preferences for upper-income taxpayers.

This option would substantially increase the number of AMT filers. Unless taxpayers change their behavior to avoid the AMT, this option would more than triple the number of filers who would owe an alternative tax, from about 600,000 to nearly 2 million.

Raise the Corporate AMT to 25 Percent. While the corporate AMT resembles the individual AMT very closely, the two taxes have different tax bases, credits, and rates. First, the corporate AMT base includes a special preference that was designed to increase the fairness of the corporate income tax. Through 1989, this special preference was computed as half of the excess of pretax book income reported to shareholders over other alternative taxable income. Beginning in 1990, this book income preference was replaced by a provision that adds 75 percent of the excess of adjusted current earnings (ACE) over other alternative taxable income. (ACE is a measure derived from earnings and profits as computed for purposes of Subchapter C of the tax code, with certain specified adjustments for depreciation and other deductions.) Second, corporations receive minimum tax credits for the tax that arises from all preferences, not just deferral preferences--as is the case for individuals. Finally, the current AMT rate is 20 percent for corporations, less than the 24 percent individual AMT rate. Raising the AMT corporate rate to 25 percent would increase revenues by about \$12 billion through 1996.

The corporate AMT, with its ACE preference, is intended to ensure that corporations reporting profits to shareholders cannot avoid paying corporate tax. Proponents of the minimum tax argue that it improves the perceived fairness of the tax system and spreads the tax burden more evenly.

Critics argue that the corporate AMT places a greater tax burden on rapidly growing and heavily leveraged corporations and provides corporations with an incentive to engage in tax-motivated transactions. For example, a firm that expects to pay the AMT may be able to reduce its tax by leasing its equipment, rather than owning the equipment and using the accelerated depreciation tax preference. Raising the AMT rate, therefore, would only increase the use of these nonproductive tax minimization transactions, as well as increase the disparity in the tax burden on new investment between those corporations that are hit by the AMT and those that are not.

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Limit Deductions to \$12,000 per Return (Single) or \$20,000 (Joint)	0.6	1.7	2.0	2.1	2.4	8.9
Limit Tax Benefit of Deductions to 15 Percent	3.8	10.6	12.8	14.6	16.6	58.5
Limit Deductions for Second Homes	0.1	0.3	0.3	0.4	0.5	1.5

SOURCE: Joint Committee on Taxation.

A home is both the largest consumer purchase and the main investment for most Americans. The tax code has historically treated homes more favorably than other investments. Current law allows homeowners to deduct mortgage interest expenses even though homes do not produce taxable income, and exempts most capital gains from home sales (see REV-05). This preferential treatment has been defended because it encourages home ownership and home improvement, which is thought to improve neighborhoods for all residents. Some have argued, however, that these preferences are larger than needed to maintain high rates of home ownership. For example, Canada, which grants preferential tax treatment to capital gains from home sales, but does not allow deductions for mortgage interest, has achieved about the same rate of home ownership as the United States.

The tax advantages accorded to owner-occupied housing are also criticized because they encourage investment to shift into homes and away from less subsidized investments. This shift may contribute to a relatively low rate of investment in business assets in the United States compared with other developed countries that do not allow such large mortgage interest deductions. Currently, about one-third of national investment goes into owner-occupied housing, so even a modest shift of investment to other sectors could have important effects.

Tax preferences for owner-occupied homes could be reduced by limiting mortgage interest deductions. Current law allows interest payments on most loans secured by first and second homes to be deducted. Interest is deductible on up to \$1 million of debt used to acquire and improve first and second homes and up to \$100,000 of other loans secured by a home, regardless of purpose (referred to as home-equity loans.) As of 1991, no other consumer interest is deductible. Current law also limits the

extent to which interest deductions for carrying assets other than first and second homes can exceed income from such assets. One way for taxpayers to circumvent the limits on consumer and investment interest deductions is to finance consumer purchases and investments in assets other than homes with loans secured by homes.

The current limits on mortgage interest deductions are criticized for several reasons. The amounts are so high that the tax code still provides a generous subsidy for relatively expensive homes. Further, only taxpayers who are fortunate enough to have substantial home equity are able to circumvent the limits on consumer and investment interest. For example, many homeowners are able to deduct interest on home-equity loans used to finance automobiles while renters and those with small amounts of home equity are not allowed to deduct interest on auto loans. In addition, some find it unfair that the same limits apply to single taxpayers as to larger households.

About \$9 billion in revenues could be raised in 1992 through 1996 by capping the mortgage interest deduction at \$12,000 per single return, \$20,000 per joint return, and \$10,000 per return for married couples who file separately. These limits are much higher than the deductions claimed on most tax returns. For example, less than 2 percent of taxpayers who claimed home mortgage interest deductions in 1987 had deductions that exceeded these amounts, while the average deduction for home mortgage interest was only about \$4,900. Even in regions of the country with the highest housing costs, the annual interest payments for the average new mortgage in 1989 were under \$17,000. At current mortgage interest rates, the proposed \$20,000 cap would allow full interest deductions on mortgages as large as about \$216,000. This amount is almost double the average size of new mortgages closed in 1989. Capping mortgage interest deductions would retain the basic tax incentive for home ownership without subsidizing the luxury component of the most expensive homes and vacation homes. Because the caps are higher than the deductions now taken by nearly all homeowners, the caps would affect home prices and homebuilding in a small segment of the market.

An advantage of capping mortgage interest is that this form of limit would be easier to comply with and enforce than restrictions based on the use of borrowed money. Also, because the caps are not indexed for inflation, their real value would gradually decline, which would encourage a shift to more productive activities over time. By phasing down the deduction gradually, the effects on current homeowners and the homebuilding industry would be cushioned.

Opponents of the interest caps point out that their effects would be highly uneven across the country. In the high-priced markets of many large cities the caps would affect many upper-middle-income homeowners, while in most other areas they would affect only those with the most luxurious homes. Further, in periods of high interest rates, recent homebuyers and those with adjustable-rate mortgages could find themselves affected by the limits, while longer-term owners with fixed-rate mortgages would not be.

Another way to reduce the tax subsidy for upper-income taxpayers would be to limit the tax savings from the current deduction to 15 percent of interest paid, the value of the deduction to those in the lowest tax bracket. This limit would increase revenue by about \$58 billion in 1992 through 1996. It would affect about 55 percent of the taxpayers who use the mortgage interest deduction and therefore would probably cause some home values to decline.

A final option would be to limit deductibility to interest on debt incurred to acquire and improve a primary residence, plus \$100,000 of other debt secured by that home. This approach would require interest deductions for second homes to qualify under the \$100,000 limit on home-equity loans. This proposal would raise about \$1.5 billion in revenues in 1992 through 1996. Most second homes are vacation homes, and some people argue that nearly unlimited deductions for such a luxury are inappropriate when most interest on loans for education, medical expenses, and other consumer purchases is not deductible. Opponents of limits on second-home mortgages argue that many owners and builders of vacation homes would suffer losses, and resort areas would face reduced growth.

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Tax 30 Percent of Gain	0.6	6.8	9.0	9.5	9.8	35.6
Tax Lifetime Gains in Excess of \$125,000	0.3	2.4	3.1	3.4	3.8	13.1

SOURCE: Joint Committee on Taxation.

Capital gains on most assets are included in taxable income at the time an asset is sold. Capital gains on home sales, however, generally escape taxation. The tax on the capital gain from the sale of a principal residence is deferred if the seller purchases another home of at least equal value within two years. If the gain does not become taxable during the homeowner's lifetime, the gain is never taxed at all. Further, taxpayers age 55 and over are allowed one opportunity to exclude up to \$125,000 of gain from a home sale even if another home of equal or greater value is not purchased within two years. If the above provisions were replaced with a tax on 30 percent of capital gains from home sales, about \$36 billion could be raised in 1992 through 1996. If lifetime gains in excess of \$125,000 were taxed, about \$15 billion could be raised over the same years.

The preferential treatment of capital gains from home sales is only one of the ways that the tax code strongly favors owner-occupied homes over other investments. (For a discussion of other tax preferences for owner-occupied homes, see REV-04.) All of these tax preferences divert saving from more productive investments into housing. One way to make the tax treatment of housing more like that of other assets would be to replace the capital gains deferral and exclusion provisions with a low-rate tax on gains from home sales. If 30 percent of the gain from home sales was included in taxable income, the tax would be only 9.3 percent for taxpayers facing a 31 percent marginal tax rate, 8.4 percent for those in the 28 percent tax bracket, and 4.5 percent for those in the 15 percent tax bracket.

A tax on gains from home sales would discourage home sales, just as current law provides an incentive for taxpayers to hold, rather than sell, other capital assets. The economic losses caused by this "lock-in" effect might be more serious in the case of home sales than of other assets, especially if families were discouraged from relocating to change jobs. The tax might also deter some homeowners (especially older taxpayers with large accrued gains) from changing homes as family requirements change.

The mobility of most homeowners could be protected by allowing the first \$125,000 of capital gains on homes to be exempted from the capital gains tax for taxpayers of all ages. Gains in excess of this amount would be fully included in income. If gains on the sale of a taxpayer's first home were less than \$125,000, the unused portion could be applied to future home sales. This exclusion would actually increase the mobility of homeowners under age 55 relative to current law because they could move to homes of lesser value without incurring a tax so long as the gain on the home sold was less than \$125,000. While this proposal would increase mobility for most homeowners, it would reduce it for those whose homes have gains over \$125,000. This additional gain could not be rolled over if a larger home was purchased, and would be fully taxed as income.

Taxing gains on home sales without the rollover and exclusion allowed by current law would also burden taxpayers with additional record keeping on home improvements. These records would be needed to establish the tax basis of a home upon sale. Currently, many taxpayers do not keep such records because the probability of any future tax on gains from a home sale is remote and the present value of such a tax is small. Record keeping would be further complicated by allowing a lifetime exemption of \$125,000, especially when people buy and sell successive homes with different spouses.

For many homes, most of the gain is the result of inflation, and taxing inflationary gains seems unfair. Taxing inflationary gains may, however, be an appropriate way to offset the tax benefit homeowners enjoy from inflation by being able to deduct fully mortgage interest payments, which include an inflation premium. The partial inclusion of gain upon sale of a home represents a possible compromise between these two views.

Any reduction in the tax benefit from home ownership would tend to lower the value of existing housing relative to other assets such as stocks. The loss in value would hurt primarily middle-income taxpayers because homes are their principal asset. If the tax benefit for home ownership needs to be reduced, limiting mortgage interest deductions instead of taxing gains on sale may be preferable, because taxing gains creates a lock-in effect and imposes a greater record-keeping burden.

**DECREASE LIMITS ON CONTRIBUTIONS TO
QUALIFIED PENSION AND PROFIT-SHARING PLANS**

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Decrease Limits for Defined Benefit Plans to the Social Security Wage Base (with Equivalent Reduc- tions for Defined Contribution Plans)	1.1	3.3	3.7	4.1	4.5	16.7
Decrease the Limit for Deferrals in Salary Reduction Plans to \$4,000	0.2	0.5	0.6	0.6	0.7	2.6

SOURCE: Joint Committee on Taxation.

Saving for retirement through employer-provided qualified pension and profit-sharing plans provides two tax advantages: the employment income contributed to qualified plans is not taxed until retirement, when the marginal tax rate is often lower, and the investment income earned within qualified plans is effectively not taxed.

Decrease Limits on Employer Contributions. Retirement payments from defined contribution plans depend on annual contributions during a person's working years and on the subsequent investment earnings of those contributions. The contributions are usually expressed as a percentage of the employee's annual earnings. Currently, contributions to defined contribution plans are limited to the lesser of 25 percent of compensation or \$30,000 per employee.

Defined benefit plans specify the pension to be received, usually expressed as a percentage of preretirement earnings. Contributions to defined benefit plans are limited to amounts that will result in annual benefits for pensions that begin at age 65 of the lesser of 100 percent of wages or \$108,963 (for 1991). For pensions that begin at an earlier age, this limit is reduced on an actuarial basis. When an employee is eligible for payments from both types of plans sponsored by the same employer, a combined limit applies--the lesser of 140 percent of wages or \$136,204 (for 1991).

These funding limits are far higher than the preretirement earnings of most workers. Less than 1 percent of employees will earn more than \$136,204 in 1991. Many analysts have questioned the need to subsidize such high levels of retirement

income. They note further that many workers (especially in the lower half of the income distribution) are not covered by qualified plans and thus do not have access to these subsidies for retirement saving.

If funding for defined benefit plans was limited to amounts necessary to pay benefits equal to the Social Security wage base (\$53,400 in 1991), with equivalent reductions in limits for defined contribution plans, the limits would still be higher than the earnings of all but about 6 percent of earners. Limiting defined benefit funding to pensions of \$53,400 and limiting defined contribution funding to \$14,702 in 1991, and indexing the limits thereafter, would raise about \$17 billion in 1992 through 1996.

The principal argument against reducing funding limits is that it would make participation less attractive to high-income business owners and top managers, and thus might discourage them from sponsoring these plans both for themselves and for their employees.

Change Salary Reduction Arrangements. Most salary reduction arrangements are part of employer-sponsored profit-sharing plans that allow employees to choose to receive lower current (taxable) compensation and to defer the remainder of compensation as a contribution to the plan. These arrangements typically are called 401(k) plans after the provision of the tax code that authorizes them. Similar arrangements are possible for some workers in the nonprofit sector (403(b) tax-sheltered annuities), for federal workers, and for workers enrolled in some Simplified Employer Plans (SEPs).

The Tax Reform Act of 1986 capped employee deferrals for 1987 in salary reduction arrangements at \$7,000 in the case of 401(k) plans, SEPs, and the federal plan. The cap is indexed for inflation and reached \$8,475 by 1991. A separate cap of \$9,500 applies for 403(b) tax-sheltered annuities. This cap is frozen until inflation raises the other caps above \$9,500.

If elective deferrals in all salary reduction arrangements were limited to \$4,000 in 1991 and indexed thereafter, about \$3 billion would be raised through 1996. The lower contribution limit might not significantly reduce saving. The incentive would only be reduced for employees with salary reduction plans who save between \$4,000 and \$8,475 annually (mostly upper-middle-income employees). Furthermore, since most studies have found saving to be unresponsive to the rate of return, the lower contribution limit might have little effect on saving even for such people.

The benefits of salary reduction arrangements have already been lowered for higher-income employees, however, by the tougher nondiscrimination rules included in the Tax Reform Act. The impact of these rules, which took effect in 1989, might be examined before new limits are imposed. In addition, keeping the maximum limit high may encourage small employers who do not offer pensions to offer salary reduction plans, thereby extending saving incentives to more workers. During the 1980s, salary reduction plans increased among employers of all sizes, even though the overall incidence of pension participation declined.

**IMPOSE A 5 PERCENT TAX ON INVESTMENT
INCOME OF PENSIONS AND IRAs**

	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Addition to CBO Baseline	4.9	8.2	8.8	9.4	10.0	41.3

SOURCE: Joint Committee on Taxation.

Under normal income tax rules, deposits to savings accounts are not deductible from taxable income. In addition, the investment income earned by those deposits is taxed in the year in which it is realized. In contrast, most contributions to qualified pension and profit-sharing plans and to IRAs are deductible, and the investment earnings of the contributions accumulate tax-free. Taxation is deferred until the accumulated amounts are paid out, usually in retirement. The tax due in retirement is essentially the tax originally due on the contributions plus interest for the delay in payment. The investment income, however, is effectively not taxed. A 5 percent tax on the realized investment income of pension and profit-sharing plans and of IRAs would raise about \$41 billion over five years.

Taxing pension and profit-sharing plans and IRAs more favorably than other savings gives taxpayers an incentive to provide for retirement income. The tax benefits are unequally distributed, however, since higher-paid workers, and especially those working long periods for a single employer, receive a disproportionately large share.

A low-rate tax on the realized investment income of these qualified plans and IRAs would retain some incentive for retirement saving. At the same time it would reduce the inequality of taxation between the higher-paid and the longer-term employees who gain the most from the current tax treatment, and the lower-paid and mobile workers who gain the least. But the tax also would reduce retirement income or require larger contributions for those participating. It would also discourage some employers and workers from continuing their plans or setting up new ones. The current failure of many employers and workers to use pensions or IRAs suggests that the existing incentive may not be strong enough. Finally, taxing the retirement income of qualified plans and IRAs might actually exacerbate inequality in retirement income among some currently covered workers. This effect takes place because employers offering qualified plans must provide benefits on a nondiscriminatory basis and if the tax reduced the number of such plans, fewer workers would be protected by requirements for equal treatment.

Taxing the realized investment income of qualified funds and IRAs would encourage these retirement funds to shift from bonds and short-term stock investments to long-term investments in growth stocks and real estate; a large share

of the return on such investments comes from appreciation in value that is not realized until the asset is sold. This investment shift would expose retirement funds to greater risk and decrease their responsiveness to changing conditions; both effects may be particularly undesirable for retirement savings. Longer-term commitments by these large institutional investors could however, benefit the entire economy by enabling corporations to focus more on long-term strategies to modernize production and to develop new products and markets. Reduced trading of stocks by these institutional investors could also reduce the short-run volatility of stock prices.

Taxing realized gains would also make pension funds less willing to sell their stock holdings in takeovers, thereby discouraging such takeovers. Pension funds would also be less willing to purchase the high-yielding junk bonds needed to finance many takeovers because they would not be able to defer the realization of interest income.

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Include Gains in Last Income Tax Return of Deceased	a	3.2	3.8	4.5	5.3	16.8
Enact Supplemental 10 Percent Estate Tax	a	0.5	0.5	0.6	0.6	2.2
Enact Carryover Basis	a	a	1.4	1.7	2.1	5.2

SOURCE: Joint Committee on Taxation.

a. Less than \$50 million.

A capital gain or loss is the difference between the current value of an asset and the owner's "basis," which is defined as the initial cost of the asset plus the cost of any subsequent improvements and minus any depreciation deductions. When an asset is sold, the capital gain or loss is said to be realized, and the realized gain or loss generally is included in taxable income. Even if an asset is given away, as from a parent to a child, the basis is carried over to the person receiving the asset, and the full gain on the asset is taxable income when the asset is sold.

An exception occurs when an asset is held until death and then distributed to heirs. In this case, the basis of the asset is "stepped up" to its value as of the date of death. When an inherited asset is sold, therefore, only the gain accruing after the death of the donor is subject to tax; the gain accruing before the donor's death is never taxed as income. The estate of the donor may be taxed under the separate estate tax, but this tax applies equally to assets that have previously been taxed under the income tax and to accrued capital gains that have never been taxed.

Gains held until death could be taxed as income by one of three methods. They could be included as income on the final income tax return of the deceased; they could be subject to a supplemental tax rate on the estate tax; or, by requiring that the decedent's basis be carried over with the inherited asset, they could be taxed as income when an heir sells the underlying asset.

By taxing gains held at death on the final income tax return of the decedent, \$16.8 billion would be raised in 1992 through 1996. Under this option, gains on assets inherited by the spouse would not be taxed; instead the decedent's basis would be carried over with the inherited assets. Gains on assets given to charity would also not

be taxed. Gains on other assets would be included in taxable income, but three exclusions would be allowed. First, to ease the problem of documenting basis, an alternative basis of one-half of an asset's current value could be elected. Second, the existing \$125,000 exclusion on the gain from sale of a principal residence could be claimed if it had not already been used. Third, a \$75,000 exclusion would be allowed for any remaining gains. Under these rules, only a small fraction of decedents would have gains subject to tax. Furthermore, any taxes paid would be deductible from the gross estate for determining estate taxes.

By levying an additional 10 percent estate tax on gains held at death, \$2.2 billion would be raised in 1992 through 1996. Under this option, gains subject to tax would be determined as described above. The tax, however, could be offset by any unused credits allowed under the estate tax. Because of these credits, few people would owe additional tax under this option. Only about 1 percent of the estates of decedents currently pay the estate tax, and the fraction paying the additional tax on gains would be about the same.

By carrying over the decedent's basis in an asset to the heirs and taxing the gain when the asset is sold, \$5.2 billion would be raised in 1992 through 1996. Under this option, the basis of an inherited asset could be set at one-half its current value if the actual basis was either lower or could not be determined. In addition, the basis of all assets in the estate would be stepped up by value-based shares of any estate tax paid. Carryover basis would leave the largest fraction of gains in an estate subject to tax, but the amount of tax would depend on when and what assets heirs decided to sell.

Gains held at death have not previously been taxed as income, although proposals for doing so have been advanced. A Treasury Department study completed under President Johnson recommended taxing gains as income on a decedent's final tax return. In 1976, the House Ways and Means Committee considered language for either an additional estate tax or for carryover basis. The Tax Reform Act of 1976 enacted carryover basis, but it was postponed in 1978 and repealed in 1980 before taking effect.

Taxing gains held until death would reduce the disparity between those who save a portion of their income until death through an appreciating asset and those whose income is entirely from taxable sources. Because ownership of assets is highly concentrated, the benefits of the current law's step-up in basis are highly concentrated among the wealthy. Succeeding generations of wealthy families can entirely avoid taxation on a major source of their income.

Taxing gains at death, through either the last income tax return or the estate tax, would also reduce the incentive for investors to hold assets until death in order to avoid tax. Current law encourages taxpayers to hold onto assets longer than they otherwise would, which distorts their investment portfolios and may hinder the flow of capital to activities with higher rates of return. This "lock-in" effect of current law was strengthened by the increase in tax rates on capital gains realized before death contained in the Tax Reform Act of 1986. Reduction of lock-in is one of the advantages cited in favor of reducing the income tax rate on realized capital gains;

taxing gains at death would also reduce lock-in, but without the revenue loss caused by reducing the tax rate on realized gains.

Carryover basis would not achieve the same unambiguous reduction in lock-in that would be achieved by taxing gains on the final income tax return or on the estate tax. Knowing that one's accrued gains will ultimately be taxed lessens the incentive to hold an asset until death. But an heir receiving an asset with a low basis would have a stronger incentive to hold onto the asset than under current law, which steps up the basis to its value at the date of death.

One of the main drawbacks to taxing gains at death is that the family of the deceased might be forced to sell assets to pay the tax. Having to sell illiquid assets at an inopportune time can reduce their value substantially; having to sell a family farm or business would impose a particular hardship on families wanting to continue the enterprise. Forced sales would not occur under carryover basis because no tax on gains held at death would be due until the heirs chose to sell the assets. The problem would also be mitigated by taxing gains held at death through the estate tax, which permits family members who continue to operate a family farm or business to defer payment for five years and then spread their repayments over the next ten years. In addition, under the estate tax, family farms and businesses can be valued in their continuing use rather than by their market value, which reduces the amount of taxable gains.

Surviving spouses could also be forced to sell assets to pay the tax if gains were taxed on the final return of the deceased or on the estate tax. Forced sales by spouses would be avoided by allowing them to carry over the basis of the deceased. Then no tax would be due until the spouse either chose to sell the assets or died.

Another argument against taxing gains held until death is the difficulty of determining the basis of assets on closely held businesses, personal property, and assets for which adequate records cannot be found. This difficulty was one of the main arguments made by those urging the delay and repeal of carryover basis in 1978 and 1980. Documenting the basis would be particularly difficult immediately after passage of a law to tax gains held until death because people currently planning to hold assets until death might not have kept adequate records. Once a tax on gains had taken effect, people would have reason to begin keeping better records. In the interim, the problem of determining basis could be reduced by invoking a minimum basis rule such as the one made for the revenue estimates above, which assumes that the basis would be at least as high as half of the current value. Records are most frequently missing for assets that have been held for a long time, and because of inflation the basis of these assets is frequently less than half of current value. Finally, if gains held at death were taxed under the estate tax, most taxpayers would be exempt because of the high credit allowed against that tax.

Making gains taxable at death could be seen as unfair to people who have been holding assets for an extended period solely to avoid the tax on their gains. In doing so, they may have passed up opportunities to reinvest in higher-earning assets, or may have held onto their businesses instead of giving them to their children. Setting a

minimum basis at half of the current market value would lessen the burden of the change in law, but would not fully protect those planning to hold until death. People in that category could be more completely protected by allowing the basis of all assets to be set at their value as of the date the legislation was enacted. Allowing such a "fresh start" would, however, substantially reduce the revenue increase from taxing gains in the initial years after the change.

Other arguments against taxing accrued capital gains at death are that the tax could discourage saving, and that a large amount of the gains represent inflation. These arguments, however, apply equally well to taxing realized gains and most other capital income, notably interest income.

**DECREASE THE EXEMPTION AND BROADEN THE
BASE FOR ESTATE AND GIFT TAXES**

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Decrease the Exemption	a	1.0	1.1	1.3	1.5	4.8
Include Life Insurance Proceeds in the Base	a	0.1	0.2	0.2	0.3	0.8
Substitute a Deduction for the State Credit	a	0.5	0.5	0.6	0.7	2.3

SOURCE: Joint Committee on Taxation.

a. Less than \$50 million.

Current law imposes a gift tax on transfers of wealth during a taxpayer's lifetime and an estate tax on transfers at death. The estate and gift taxes together constitute a unified transfer tax, since one progressive tax is imposed on the cumulative transfer during lifetime and at death. The estate and gift tax rates currently range from 18 percent on the first \$10,000 of transfers to 55 percent on transfers of more than \$3 million. (Beginning in 1993, the top rate will be 50 percent on transfers of more than \$2.5 million, and the benefits of graduated rates will be phased out for estates above \$10 million.)

The cumulative amount of estate and gift taxes is reduced by a unified credit. The tax is first computed without any exemption, and then the unified credit is subtracted to determine the amount of tax payable. Since 1986, the amount of the credit has been \$192,800, effectively exempting the first \$600,000 of transfers from estate and gift tax. The Economic Recovery Tax Act of 1981 increased the credit to its present level from \$47,000. This increase was intended primarily to offset the effects of inflation on property values. Also, the Congress had determined that the credit amount, which had not been increased since 1976, failed to provide relief for estates containing farms, ranches, or small businesses, with the result that legatees often were forced to sell family businesses to pay the estate or gift tax. (Beginning in 1993, the unified credit will be phased out for estates above \$10 million.)

Some would argue that the increase enacted in 1981 was too large because the rate of inflation has been lower than anticipated. Lowering the credit to the 1982 level adjusted for inflation would exempt from taxation the first \$300,000 of transfers, raising nearly \$4.8 billion in 1992 through 1996 and affecting roughly 15 percent of estates. Although the majority of estates would still be untaxed, many large homes, family farms, and small businesses would be made subject to tax. Lowering the credit would increase the tax on midsized estates, the assets of which might have to be

liquidated to pay the tax--an issue that concerned the Congress when it voted to increase the credit in 1981.

Lowering the credit, however, would have a leveling effect on the distribution of wealth. Also, a great deal of wealth consists of capital gains that have never been taxed. Higher estate taxes would be a means of taxing these gains.

Another means of increasing revenues from estate and gift taxes would be to broaden their base--for example, by including proceeds of life insurance policies or by substituting a deduction for the credit now available for state inheritance and gift taxes. Making life insurance proceeds subject to estate and gift taxes would raise \$0.8 billion in 1992 through 1996. A difficulty with this proposal is that it would provide an incentive to seek substitutes for life insurance. Many employers, for example, might substitute survivor benefits for life insurance under pension plans, and, since contributions to pension plans are tax-deferred, revenues from this provision eventually might decline.

Substituting a deduction for the state inheritance and gift tax credit would raise \$2.3 billion from 1992 to 1996. The disadvantage of a deduction over a credit is that, because the value of an additional dollar of deductions increases with the marginal tax rate, the deductions are worth more to higher-bracket taxpayers. An alternative means of raising revenue might be to maintain the credit, but at a reduced level. For example, providing a partial credit of 8 percent of state inheritance and gift taxes would raise the same amount of revenue as substituting a deduction, without disproportionately benefiting higher-bracket taxpayers.

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Phaseout Starting at \$30,000	0.1	1.1	1.2	1.5	1.7	5.6
\$50,000	a	0.5	0.6	0.8	0.9	2.8
\$65,000	a	0.3	0.3	0.4	0.6	1.6

SOURCE: Joint Committee on Taxation.

a. Less than \$50 million.

Taxpayers who incur employment-related expenses for the care of children and certain other dependents may claim an income-tax credit. The credit per dollar of allowed expenses declines from 30 percent for taxpayers with adjusted gross incomes (AGI) of \$10,000 or less to 20 percent for taxpayers with AGI above \$28,000. Creditable expenses are limited to \$2,400 for one child and \$4,800 for two or more, and cannot exceed the earnings of the taxpayer or, in the case of a couple, the earnings of the spouse with lower earnings. In 1989, about \$2.4 billion in credits were claimed on 6.0 million tax returns.

The tax code first recognized work-related child care costs in 1954, when an itemized deduction of up to \$600 was allowed for all single taxpayers and for lower-income couples when both spouses worked. In 1976, the deduction was converted to a 20 percent credit and the income limitations were removed. In 1981, the credit was raised to 30 percent for the lowest-income taxpayers. In 1987, expenses for overnight camps were made ineligible for the credit. In 1988, the credit was restricted to expenses for children under age 13, creditable expenses were reduced by the amount of employer-paid dependent care benefits, and taxpayers were required to provide the taxpayer identification number of the provider of the care. Between 1987 and 1989, the number of families claiming the credit dropped by about 30 percent.

Some people view the credit as a tax subsidy intended to encourage workers to provide adequate care for dependents. But 39 percent of the subsidy now benefits families with incomes of \$50,000 or more. The cost of this subsidy could be reduced by targeting it more narrowly on families who otherwise would have difficulty affording adequate care. One way to target the subsidy would be to reduce the credit percentage as incomes rise. For example, reducing the credit percentage by one percentage point for each \$1,500 of AGI over \$30,000 would raise about \$5.6 billion in 1992 through 1996. This option would reduce the credit for 42 percent of families that would be able to claim the credit under current law and would eliminate it for an additional 25 percent of claimants (families with AGI over \$58,500). Alternatively, phasing out the credit between \$50,000 and \$78,500 would raise about \$2.8 billion in

the same period; this option would reduce the credit for about 27 percent of claimants and eliminate it for another 10 percent. Finally, phasing out the credit between \$65,000 and \$93,500 would raise \$1.6 billion in the same period, reducing the credit for 13 percent of claimants and eliminating it for another 5 percent.

Opponents of reducing the credit argue that it is not a subsidy. Instead, they view it as needed for reasons of fairness, arguing that families who pay for dependent care in order to work are less well off, and therefore should pay less tax, than taxpayers with the same income who either have no dependents or have one spouse at home. Phasing out the credit also could be criticized because it would raise the marginal tax rate for taxpayers with incomes in the credit phaseout range, which could discourage some taxpayers from working. For taxpayers with incomes in the phaseout range who claim the full credit, these proposals could raise marginal tax rates by as much as 3.2 percentage points. For taxpayers now in the 15 percent bracket, this would be a 21 percent increase in the marginal rate. These families would be affected only under the option to begin the phaseout at \$30,000. Those in the 28 percent bracket would have an 11 percent increase in the marginal rate.

If the credit was phased out, employees could seek other tax subsidies for dependent care by asking their employers to provide dependent-care assistance plans. Current law allows up to \$5,000 in payments under these plans to be excluded from an employee's income, in effect allowing participants in the plan to purchase dependent care out of pretax income. The Congress might want to consider placing similar limitations on the use of this fringe benefit.

REV-11 **TAX THE INCOME-REPLACEMENT PORTION
OF WORKERS' COMPENSATION AND
BLACK LUNG BENEFITS**

	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Addition to CBO Baseline	1.1	3.2	3.3	3.5	3.7	14.9

SOURCE: Joint Committee on Taxation.

Under current law, unemployment benefits are fully taxable to all recipients, and Social Security and Railroad Retirement (Tier I) benefits are partially taxable to upper-income recipients. Other entitlement benefits are not taxable. Many of these benefits, such as Aid to Families with Dependent Children (AFDC), are means-tested. Revenue gains from making such benefits taxable would be extremely small because few people who qualify for these programs would have enough income to incur any income tax liability. However, revenues could be raised by taxing the portion of Workers' Compensation and Black Lung benefits that replaces income lost as the result of work-related injuries or Black Lung disease. Including the income-replacement portion of these benefits in AGI would add about \$15 billion to revenues in 1992 through 1996. The remaining portion that reimburses employees for medical costs (about 30 percent) would not be taxed.

Taxing the income-replacement portion of Workers' Compensation and Black Lung benefits would make the tax treatment of these entitlement benefits comparable to the treatment of unemployment benefits and to the treatment of the employment income that these benefits replace. It would also improve work incentives for disabled workers who are able to return to work. Under current law, the after-tax value of the wages they are able to earn may be less than the tax-free benefits they receive while disabled.

Opponents of taxing these benefits note that legal or insurance settlements for non-work-related injuries are not taxable, even if a portion of them reimburses for income loss, and that taxation of workers' compensation benefits would therefore treat these two types of compensation inconsistently.

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Tax Some Health Insurance Premiums	(See 550-2)					
Tax Life Insurance Premiums						
Income tax	1.6	2.3	2.5	2.6	2.7	11.7
Payroll tax ^{a/}	0.8	1.1	1.2	1.2	1.3	5.6
Impose a 3 Percent Excise Tax on the Value of Nonretire- ment Fringes	2.6	3.9	4.3	4.7	5.1	20.6

SOURCE: Joint Committee on Taxation.

a. Estimates are net of reduced income tax revenues.

Employee compensation is taxable unless the tax code contains an explicit exception. Such exceptions apply to most employer-paid nonretirement fringe benefits, which are excluded from the income and payroll tax bases even though they constitute current compensation to employees. This exclusion, which has been going up as a percentage of total employee compensation, reduces revenues substantially. For employer-paid health and life insurance premiums alone, the revenue loss will be roughly \$40 billion in income taxes and about \$26 billion in payroll taxes in 1992.

In addition to employer-provided health and life insurance, the law explicitly excludes from gross income employer-paid dependent care and miscellaneous benefits, such as employee discounts, parking, and athletic facilities. (The exclusion of educational assistance benefits, which under prior law was to expire on September 30, 1990, has been extended to December 31, 1991.)

The exclusions can be criticized on the basis of both efficiency and fairness. They are inefficient to the extent that employees receive tax-free benefits that they might not purchase with after-tax income. The availability of tax-free services affects the nature, amount, and cost of the services. For example, employer-paid health insurance plans may have contributed to the strong growth in the variety and amounts of health care services provided, which in turn may have contributed to sharp rises in health care costs. The higher prices are paid by all who need health care, not just recipients of tax-free insurance.

Some view the exclusions as unfair because a taxpayer receiving no fringe benefits pays more tax than another with the same total income but a larger share in the form of fringe benefits. Further, the tax savings from excluding fringe benefits are greater for those with higher incomes because they face higher marginal tax rates and because fewer fringe benefits are typically provided for low-wage workers.

Making all fringe benefits taxable would present problems in valuing benefits and in assigning their value to individual employees. Few valuation problems arise when the employer purchases goods or services and provides them to employees, but it is more difficult to determine the value of a facility, such as a parking lot, provided by the employer. Further difficulties arise if the total value of the fringe benefits needs to be assigned to individual employees. In cases where the employer provides a service, such as day care, it might be considered unfair to assign the same value to all employees regardless of their level of use; however, it could be administratively complex to assign values that depend on each worker's use. Further, the costs of collecting taxes on small fringe benefits (such as employee discounts) could exceed the revenue collected.

The per-employee value of employer-paid health and life insurance would be relatively easy to determine. The premiums paid for each employee could be reported on the employee's W-2 form, and withholding computed as it is for other taxable income, as is already done for some life insurance premiums (see below). The measurement of insurance values would be more difficult when benefits are provided directly, as when employers provide medical care or reimburse employees for medical costs incurred under self-insurance plans.

An alternative way to tax nonretirement fringe benefits would be to impose the tax on employers, based on the total cost of the fringe benefits provided, rather than on employees. Although determining the total cost of fringe benefits would still present some difficulties, this option would eliminate the need to assign the value of fringe benefits to individual employees.

Tax Some Employer-Paid Health Insurance Premiums. The present exclusion for employer-paid health insurance premiums has been criticized as unfair to those who must pay for their health insurance with after-tax dollars. Taxpayers who pay for their own health insurance can deduct the cost of their insurance only to the extent that their total medical expenses exceed 7.5 percent of adjusted gross income. Two options to tax some employer-paid health insurance premiums are described elsewhere (see 550-2).

Tax Employer-Paid Life Insurance Premiums. Group term life insurance premiums paid by employers are currently excluded from taxable income, but the exclusion is limited to the cost of the first \$50,000 of insurance, and nondiscrimination rules apply. The Omnibus Budget Reconciliation Act of 1987 made the part of life insurance premiums that is taxable under the income tax also taxable under the payroll tax. The exclusion is not available to the self-employed. Making all employer-paid premiums taxable would add about \$12 billion to income-tax revenues and about \$6 billion to payroll-tax revenues in 1992 through 1996.

A difficulty with this option arises because many employers provide death benefits under pension plans as substitutes for life insurance. Employer contributions to pension plans are income-tax deferred (and the first \$5,000 of death benefits paid are tax-exempt) and are exempt from the payroll tax. If employer-paid life insurance plans were made taxable, employers might choose to offer less life insurance and larger death benefits on pension plans instead.

Impose an Excise Tax on the Value of Nonretirement Fringe Benefits. An alternative to including employer-provided benefits in the income of recipients would be to impose an excise tax on specific benefits, to be paid by employers. These benefits would include the full employer's share of health insurance, premiums to fund the first \$50,000 of life insurance, dependent care, parking, athletic facilities, and employee discounts. A tax imposed at a 3 percent rate, for example, would raise about \$21 billion in 1992 through 1996. The bulk of these revenues would come from taxing employer-paid health insurance. Under this option, employers would need to know only their total fringe benefit costs; they would not have to value the benefits paid to each employee. This tax would maintain most of the incentives for employers to provide fringe benefits instead of taxable wages because the 3 percent excise tax rate would be much lower than the tax rate on wages.

This tax could be criticized as unfair for two reasons: the tax rate would not rise with the income of employees, as it would if the benefits were taxed under the income tax; and the tax might result in lower taxable wages for all employees, regardless of the benefits each receives. The degree of the inequity, however, would be small as long as the tax was imposed at a low rate.

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Repeal the Credit	1.4	2.6	2.7	2.9	3.0	12.6
Replace the Credit with a Wage Credit	0.2	0.3	0.4	0.5	0.5	1.9

SOURCE: Joint Committee on Taxation.

Income earned by U.S. corporations operating in Puerto Rico or U.S. possessions is generally treated as foreign-source income, and the U.S. federal tax on such income is offset by the foreign tax credit (FTC) for any tax paid to the possession. Section 936 of the Internal Revenue Code also allows eligible firms to claim a possessions tax credit, which provides a special tax preference for certain business and qualified investment income from Puerto Rico and other U.S. possessions. A corporation that has received at least 80 percent of its gross income for the last three years from sources within Puerto Rico or any U.S. possession (at least 75 percent from the active conduct of a trade or business) may claim a possessions tax credit instead of the FTC. The possessions tax credit is equal to the U.S. tax on the qualified possessions source income. The credit effectively exempts most such income from tax because Puerto Rico imposes very little tax on possessions corporations.

The objective of the possessions tax credit has been to promote employment. The principal argument for repeal is that this incentive has provided significant tax benefits to certain businesses, without stimulating much employment in U.S. possessions. Pharmaceutical manufacturers, who received 46 percent of the tax benefits in 1983 according to the Treasury Department, have been among the largest beneficiaries of the possessions tax credit. Despite very complex limitations enacted in the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA), the primary incentive provided by the credit is to reallocate artificially to possessions the income from intangible assets developed in the United States rather than to encourage investment in tangible capital, such as plant and equipment. The Tax Reform Act of 1986 and subsequent regulations imposed further limitations, but the credit remains a substantial tax expenditure. Repealing the credit would increase revenues by \$13 billion over five years.

Critics of the credit argue that a better-targeted subsidy, such as a wage credit, would be a more cost-effective way to promote employment. The Treasury Department estimated that the revenue loss from the possessions credit equaled approximately 125 percent of total compensation in possessions corporations in 1983, based on tax return data from Puerto Rico. The Treasury Department in 1985

proposed a wage credit equal to 60 percent of wages up to the federal minimum wage, and 20 percent of wages between one and four times the minimum wage. The wage credit would replace the possessions tax credit and the foreign tax credit on possessions-source income for qualifying corporations. The Treasury proposal would also continue providing possessions credits on active business income of qualifying possessions corporations for five years. Despite the grandfather provision, the wage credit would raise \$2 billion over the 1992-1996 period because of the repeal of the subsidy to passive investment income. Over the long term, the revenue gains would be much larger.

One argument against repeal of the possessions tax credit is that the credit is necessary to stimulate investment in high-technology capital-intensive manufacturing such as pharmaceuticals and electronics. The wage credit option, however, attempts to address this critique by providing a subsidy to employment, even at relatively high wages. Moreover, by subsidizing only labor, the wage credit might stimulate more employment than the broader possessions tax credit.

Another argument against repeal is that repeal would cause unemployment in the subsidized industries as well as in other sectors that sell products and services to the possessions corporations and their employees. The generous transition rule and new wage subsidies in the second option are aimed at minimizing these disruptions.

	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Addition to CBO Baseline	3.1	5.5	4.1	2.7	1.6	17.0

SOURCE: Joint Committee on Taxation.

Under the income tax, the ordinary costs of doing business can be fully deducted as they are incurred or paid, but capital expenditures cannot. Instead, capital expenditures—including the cost of acquiring assets whose useful lives extend beyond the current tax year—must be capitalized and deducted ratably as the assets wear out in order to match costs with income. Advertising is currently treated as an ordinary business cost because providing information about a product is considered essential to its sale, and hence the cost can be fully deducted when incurred.

Because advertising often contributes to brand recognition and product acceptance that may last for years, capitalizing a portion of advertising costs and deducting it over several years might improve the matching of business costs with income. Requiring 20 percent of all advertising costs to be capitalized and deducted ratably over four years would raise about \$17 billion in 1992 through 1996.

Because advertising is not always easy to identify, the option would require complex rules to distinguish advertising costs from other ordinary business costs. Some costs such as those of notifying customers of price changes, redesigning product packaging, or changing store displays, might or might not be viewed as advertising. Moreover, because the useful life of advertising depends on its unknown effect on customers, any amortization rate would be arbitrary.

Amortizing a portion of advertising costs would raise the after-tax cost of advertising and discourage its use. Some argue that advertising should be discouraged because it is socially wasteful. Some go further and argue that it is socially harmful because it reduces competition from businesses who cannot afford large advertising budgets.

Alternatively, others argue that advertising is socially useful because it promotes product diversity and gives customers more choice. Moreover, advertising can increase competition in some cases by enabling new entrants to carve out market niches for themselves.

REV-15 INCREASE TAXATION OF SOCIAL SECURITY
AND RAILROAD RETIREMENT BENEFITS

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Increase Fraction of Benefits Included in AGI						
Tax up to 60 Percent of Benefits	0.7	1.4	1.5	1.7	1.8	7.1
Tax up to 85 Percent of Benefits	2.3	4.9	5.4	6.0	6.7	25.3
Eliminate the Income Thresholds						
Tax 50 Percent of Benefits	3.7	9.5	9.8	10.2	10.6	43.8
Tax 60 Percent of Benefits	6.4	13.1	13.7	14.3	14.9	62.3
Tax 85 Percent of Benefits	10.9	22.4	23.5	24.8	26.0	107.7

SOURCE: Joint Committee on Taxation.

Social Security and Railroad Retirement (Tier I) benefits constitute the federal government's largest entitlement commitment. These benefits could be reduced directly through changes in the benefit formula (see 650-3 and 650-4) or cost-of-living adjustments (see 650-1 and 650-2), or indirectly by further using the income tax to decrease the net value of benefits paid to recipients with other income. For the same reduction in the federal deficit, an increase in the taxation of benefits would concentrate the burden more on higher-income households than would, for example, a cost-of-living adjustment (COLA) freeze, where the burden would also fall on lower-income households whose principal income source is Social Security. Attempts to curtail the cost of COLAs and, at the same time, protect the poor reduce the deficit very little. Because there is a lack of information on peoples' comprehensive incomes, protection must be given to many people who have low benefits but who also have other income. In comparison, the tax system can be used to reduce the deficit more substantially without harming low-income people. Many argue that increased taxation of benefits is, therefore, a preferable way to achieve a given target of deficit reduction among the elderly and disabled.

Increased taxation of benefits could be regarded as a violation of long-held understandings about the implicit promises in the Social Security and Railroad Retirement programs during the time these people were working and paying their

payroll taxes. However, numerous changes in Social Security and Railroad Retirement benefits, in the tax treatment of the benefits, and in the taxes used to fund them, have been made since the programs were instituted. Another argument that could be made against increased taxation of benefits is that up to half of benefits are already taxed under current law, substantially decreasing the rate of return that past and present high-wage workers will receive in Social Security. Taxing a higher percentage would decrease their rate of return even further, thereby possibly eroding support for the program.

The 1983 Social Security Amendments made Social Security and Tier I benefits partially taxable to higher-income households. Under current law, adjusted gross income (AGI) includes the lesser of one-half of Social Security and Tier I benefits, or one-half of the excess of the taxpayer's combined income (AGI plus nontaxable interest income plus one-half of Social Security and Tier I benefits) over a threshold amount. The threshold amount is \$25,000 for single returns and \$32,000 for joint returns. Because these thresholds are not indexed, a growing percentage of recipient households will be affected by this 1983 provision; the percentage of families who will pay taxes on their Social Security benefits is expected to grow from 14 percent in 1987 to 26 percent in 1996.

In the immediate future, taxation of Social Security and Tier I benefits could be increased by raising the fraction of benefits included in AGI, or by eliminating or reducing the thresholds.

Increase Fraction of Benefits Included in AGI. Employers pay one-half of workers' combined payroll taxes from before-tax income under current law, while employees pay the remainder out of income that is taxed. Accordingly, many people reason that one-half of Social Security and Tier I benefits is properly includable in AGI. A competing view is that these benefits should be taxed more like public employee pensions and those few private-sector pensions in which individuals make contributions from after-tax income. Under current law, a fraction of benefits from contributory pension plans is excluded from tax. This fraction, called the exclusion ratio, is based on the nominal amount of after-tax contributions made by employees. The remaining share of these benefits is fully taxable. Because the ratio of after-tax contributions (the employee share of payroll taxes) to Social Security and Tier I benefits varies by each worker's earnings history and marital status, no single exclusion ratio is correct for all beneficiaries. Requiring the Social Security Administration to calculate separate exclusion ratios for each beneficiary would be administratively burdensome. A 15 percent exclusion ratio--that is, including up to 85 percent of benefits in AGI--would make the tax treatment of Social Security for workers with high earnings roughly comparable to that afforded contributory pensions under current law, and would be more generous for those with lower earnings. If current law thresholds were maintained, about \$25 billion would be raised in 1992 through 1996 by increasing includable benefits to 85 percent. This provision would affect 20 percent of couples and individuals receiving benefits in the 1992 tax year.

An alternative view is that the current tax treatment of contributory pensions--and, by extension, Social Security and Tier I--should be changed to allow retirees to

recover tax-free the amount of their after-tax contributions adjusted for inflation, a more favorable treatment than most private pensions receive. Under current tax law, however, no such adjustments for inflation are made for a taxpayer's investments from after-tax income in pensions, capital assets, or other holdings. Depending on long-term inflation assumptions, an inflation-adjusted exclusion ratio along the same lines falls between 30 percent and 40 percent; this would mean including up to 60 percent or 70 percent of benefits in AGI. For example, including up to 60 percent of benefits in AGI with current thresholds would raise about \$7 billion in 1992 through 1996. (For more discussion of alternative exclusion ratios, see Congressional Budget Office, "An Analysis of Alternatives for Taxing Social Security as a Private Pension," Staff Working Paper, March 1988.)

Eliminate or Reduce the Thresholds. In addition to the thresholds, the tax code protects lower-income elderly households from income taxation through personal exemptions, the regular standard deduction, and an additional standard deduction for the elderly. Under current law, 80 percent of elderly couples and individuals with benefits will pay no income tax on their benefits in 1992. If the thresholds on taxing benefits were eliminated, about \$44 billion would be raised in 1992 through 1996, and the share of beneficiary couples and individuals paying no tax on their benefits in 1992 would decline to 39 percent. Eliminating the thresholds would remove a tax preference that is not well targeted on those with lower incomes and would reduce tax disparities among middle-income households. Under current law, the fraction of income paid in income taxes by middle-income elderly families is less than half the fraction paid by nonelderly families with comparable income. In addition, for a comparable deficit reduction, eliminating the thresholds would have smaller effects on the disposable incomes of the lower-income elderly than curtailing cost-of-living increases or similar measures.

The amount of revenue raised would be greater if eliminating the thresholds was combined with raising the fraction of benefits included in AGI. For example, eliminating the thresholds and raising the fraction of benefits included in AGI from 50 percent to 60 percent would raise \$62 billion in 1992 through 1996.

An argument against complete elimination of the thresholds with no other changes is that it would decrease the disposable incomes of today's elderly with incomes below the median, while leaving upper-income elderly unaffected. To minimize the effects on moderate-income recipients, the thresholds could instead be lowered--for example, to \$12,000 for single filers and \$18,000 for joint returns. With up to 50 percent of benefits includable in AGI, these lower thresholds would raise about \$22 billion in 1992 through 1996, or roughly half of what would be generated by including 50 percent with no thresholds. With up to 60 percent of benefits included in AGI, the lower thresholds would raise \$34 billion in 1992 through 1996 as compared with the \$62 billion that would be raised by including 60 percent with no thresholds. Lowering the thresholds to \$12,000 and \$18,000 while including 85 percent of benefits in AGI would raise \$64 billion as compared with \$108 billion raised by including 85 percent of benefits with no thresholds.

**EXPAND MEDICARE AND
SOCIAL SECURITY COVERAGE**

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Expand HI Coverage to State and Local Govern- ment Employees Not Now Covered	1.1	1.5	1.5	1.5	1.5	7.2
Expand OASDI Coverage to New State and Local Government Employees	0.3	1.0	1.7	2.5	3.3	8.9

NOTE: These estimates do not include the effect of any increases in benefit payments that would result from the option. These would be small over this five-year period. Estimates are net of reduced income tax revenues.

The largest group of workers not paying Medicare and Social Security payroll taxes are government workers, even though legislation during the past decade has mandated participation by certain groups of federal, state, and local government workers. All federal workers were required to pay Medicare payroll taxes beginning in 1983. Federal employees hired after December 31, 1983, were required to pay Social Security payroll taxes. State and local workers hired after March 31, 1986, were required to pay Medicare payroll taxes. The most recent legislation, OBRA90, expanded Social Security and Medicare coverage to include state and local government workers not covered by any retirement plan.

If state and local workers hired before April 1, 1986, were required to pay Medicare payroll taxes, and all new state and local workers were required to pay Social Security payroll taxes, then coverage of state and local workers would resemble that of federal workers and reduce the inequity of benefits received in relation to payroll taxes paid. Under current law, many state and local employees will qualify for Social Security and Medicare benefits based on other employment in covered jobs or their spouses' employment. These workers will thus receive benefits in return for a smaller amount of lifetime payroll taxes than paid by those who work continuously in covered employment. This inequity is especially apparent for Medicare benefits: over 90 percent of retired state and local government workers receive benefits, but only about 70 percent worked in a covered state and local government job. Inequitable

treatment is less of a problem in the case of Social Security benefits, because these benefits are reduced for retired government workers who have worked a substantial portion of their careers in employment not covered by Social Security.

Although expanding Medicare and Social Security payroll taxes to include more state and local workers would increase the government's liability for future program benefits, additional revenues would more than offset increased benefits in both the short and the longer term. Expanding Medicare coverage would have a small effect on future benefit payments, because most state and local workers are already able to claim Medicare benefits. Expanding Social Security coverage would raise future benefits significantly, but the added payroll tax revenue would exceed any added benefits for many years to come.

Expand Medicare Coverage to State and Local Government Workers Not Now Covered. Expanding Medicare coverage to state and local government workers hired before April 1, 1986, would raise about \$7 billion in 1992 through 1996. This option has been considered during the budget reconciliation process in the last several years, and has been included in the President's budget for the last several years.

Expand Social Security Coverage to New State and Local Government Workers. Expanding Social Security coverage to new state and local workers would raise about \$9 billion in 1992 through 1996, and would ultimately improve the retirement benefits of these workers. It would benefit new state and local government workers and their families in three ways. First, newly hired workers would find it easier to qualify for disability and survivors' benefits under Social Security, because of the portability of coverage, than under many public employee benefit programs. Second, eligibility under Social Security is not lost if the employee changes jobs. Third, because Social Security benefits are calculated on the basis of indexed wages, while benefits from public pension plans are calculated on the basis of nominal wages for a given amount of covered wages, younger and short-service workers would receive more generous retirement benefits from Social Security than if they were covered solely by a public pension plan.

State and local governments would have to pay the employer's share of Social Security taxes on new employees if coverage were made mandatory. Since state and local government participation in Social Security is now voluntary, those states with a low percentage of covered employees would bear most of the cost from mandatory coverage. In eight states--Alaska, California, Colorado, Louisiana, Maine, Massachusetts, Nevada, and Ohio--less than 50 percent of state and local employees are now covered under Social Security. Representatives of some localities argue that the change would impose a difficult financial burden for two reasons. First, state and local governments would have to create separate pension plans for workers newly covered by Social Security, so that their pension benefits would not duplicate Social Security retirement benefits. Maintaining separate pension plans could be administratively complex. Second, the funding for current state and local pension plans might be inadequate for governments operating their pension plans on a pay-as-you-go basis,

using current contributions to pay benefits to current retirees. Finally, while increased payroll tax collections would lower the federal deficit, these greater collections would not necessarily raise national saving if states reacted by lowering their own contributions to state and local pension plans.

	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Addition to CBO Baseline	1.9	4.4	4.8	5.1	5.6	21.8

NOTE: Estimates are net of reduced income tax revenues.

Under current law, wages above the Medicare Hospital Insurance taxable maximum are exempt from all payroll taxes. The Omnibus Budget Reconciliation Act of 1990 raised the taxable maximum for 1991 from \$53,400, the maximum for Social Security, to \$125,000. For workers now paying Hospital Insurance taxes, only about 5 percent of wages--earned by about 2 percent of the workers--are above the taxable maximum. If the taxable maximum for Medicare was repealed beginning in 1992, the deficit would decrease by about \$22 billion in 1992 through 1996.

A repeal of the Medicare taxable maximum would improve the solvency of the Medicare trust fund and lessen the regressivity of the Medicare payroll tax. Solvency of the Medicare trust fund is attained if total revenues equal or exceed total obligations over a 75-year period. The HI trust fund is not solvent; in 1991, the fund's trustees projected it will begin showing a negative cash flow in 1995 and will be exhausted by 2005. Repeal of the Medicare taxable maximum would lessen the regressivity of the Medicare payroll tax by ending the current situation in which workers earning more than the taxable maximum pay a smaller share of their income in payroll taxes than other workers.

Opponents of this option argue that the benefits from gains in trust fund solvency and a less regressive Medicare tax would be outweighed by the costs of increasing the subsidy paid by high-wage workers to other workers. High-wage workers already subsidize other workers through their higher tax payments because participants in the Medicare program receive the same benefits regardless of how much is paid in payroll taxes. Repealing the Medicare taxable maximum would broaden the gap between taxes paid and benefits received by high-wage workers, thereby increasing this subsidy.

Leaving the taxable maximum where it is and increasing the Medicare tax rate from 1.45 percent to 1.53 percent for employer and employees would raise about the same revenue over five years as would repealing the taxable maximum. Funding Medicare benefits in this manner would be less likely to increase the subsidy high-wage workers pay to other workers, but it would also increase the regressivity of the Medicare payroll tax.

Some people oppose any increase in Medicare taxes. They argue that the financial problems of the Medicare trust fund stem from the unanticipated growth in outlays and that the solution to these problems should be sought by decreasing spending rather than by increasing taxes.

**INDEX THE UNEMPLOYMENT INSURANCE
TAXABLE WAGE BASE**

	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Addition to CBO Baseline	0.2	0.6	1.1	1.5	1.6	5.1

NOTE: Estimates are net of reduced income tax revenues.

The Unemployment Insurance (UI) program is financed primarily by federal and state payroll taxes on employers. The federal UI tax is imposed on the first \$7,000 of wages per worker. Credits against the federal UI tax rate are used to induce states to establish state wage bases that conform with or exceed the federal wage base. All states have adopted a state wage base of at least \$7,000 and most states provide an automatic adjustment to prevent the state wage base from falling behind the federal wage base. Because the federal UI wage base has been increased only three times since 1940, when it was \$3,000, the proportion of wages in covered employment subject to the federal tax has fallen from over 90 percent in 1940 to less than 35 percent today. The ratio of the net aggregate state trust fund balance to total covered wages and salaries has also fallen from 3.1 percent in 1970 to 2.0 percent in 1990.

Indexing the federal UI wage base by linking it to the change in the national average wage--as is done with the Social Security wage base--would prevent further erosion in the real UI wage base. Indexation would maintain the current relationship between covered wages and unemployment taxes, assuming no change in state UI tax schedules. Moreover, because UI benefits tend to increase with nominal wages, it would preserve the current relationship between per capita tax payments and per capita benefits.

Indexing the wage base, beginning January 1, 1992, would increase combined federal and state UI revenues by almost 5 percent, while reducing the federal budget deficit by about \$5 billion in 1992 through 1996 and lessening the regressivity of the UI tax. Because both the federal and state UI taxes are counted as revenue to the federal government, increases in both revenue sources decrease the federal budget deficit. Federal UI tax revenues would rise nearly in proportion to future increases in the federal tax base. In contrast, aggregate state UI tax revenues might rise less than proportionately for two reasons. The first reason is that states with tax bases currently higher than the federal base--about two-thirds of the states--might not be affected by indexing for several years. The second reason is that states with adequate UI trust fund balances might choose to offset the effects of an increased wage base by reducing their tax rates. Indexing the wage base would concentrate the tax

increase on wages of workers now earning more than the current tax base; this change would make the UI tax somewhat less regressive than it is now.

Opponents argue that indexing the wage base is unnecessary, and that it will lead to higher labor costs and more unemployment in some states. In addition, because states are now charged interest on loans from the federal UI program, they argue that incentives are already in place to encourage responsible state fiscal behavior without indexing the federal wage base. States should be free to determine their UI wage base for employers in their state without being penalized for nonconformity with the federal UI wage base.

REDUCE TAX CREDITS FOR REHABILITATION OF OLDER BUILDINGS

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Repeal Credit for Nonhistoric Structures and Reduce Credit for Historic Structures to 15 Percent	0.1	0.2	0.2	0.2	0.2	0.7
Repeal the Credits	0.2	0.3	0.3	0.3	0.4	1.5

SOURCE: Joint Committee on Taxation.

Tax credits for rehabilitation are intended to promote the preservation of historic buildings, encourage businesses to renovate their existing premises rather than relocate, and encourage investors to refurbish older buildings. The credit rate is 10 percent for expenditures on structures built before 1936, and 20 percent for buildings certified as historic structures by the Department of the Interior because of their architectural significance.

The credits favor commercial use over most rental housing and may, therefore, divert capital from more productive uses. Commercial buildings can qualify for the 10 percent or 20 percent credit, whereas rental housing can qualify only in certified historic structures. Moreover, in favoring renovation over new construction, the credits may encourage more costly ways of obtaining more housing and commercial buildings.

Rehabilitation may have social benefits: for example, it may discourage the destruction of historically noteworthy buildings. This objective, however, might be accomplished at a lower cost by retaining a credit only for the renovation of certified historic buildings. Some surveys have indicated that a 15 percent credit would be sufficient to cover the extra costs both of obtaining certification and of undertaking historic-quality rehabilitation. If the credit for historic structures was reduced to 15 percent and the credit for nonhistoric structures was repealed, revenue gains over the 1992-1996 period would be \$0.7 billion. Repeal of the credit would raise \$1.5 billion over the same period.

**TAX CREDIT UNIONS LIKE OTHER
THRIFT INSTITUTIONS**

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Tax All Credit Unions	0.4	0.8	0.8	0.9	1.0	3.9
Tax Credit Unions With More Than \$10 Million in Assets	0.3	0.7	0.7	0.8	0.9	3.4

SOURCE: Joint Committee on Taxation.

Credit unions, organized for the benefit of members and operated without profit, are not subject to federal income taxes and hence are treated more favorably than competing thrift institutions, such as savings and loan institutions and mutual savings banks. Taxing all credit unions like other thrift institutions would raise \$3.9 billion in 1992 through 1996. About \$0.5 billion less would be raised by taxing only credit unions with assets above \$10 million, which represent only about 20 percent of the total number of credit unions.

Credit unions, savings and loans, and mutual savings banks were originally all tax-exempt, but in 1951 the Congress removed the tax exemptions for savings and loans and mutual savings banks. These were considered to be more like profit-seeking corporations than nonprofit mutual organizations.

Since 1951, credit unions have come to resemble the other thrift institutions in certain respects. Credit union membership is no longer limited to people sharing a "common bond," generally a place of employment. Since 1982, credit unions have been allowed to extend their services to others, including members of other organizations. In addition, most credit unions allow members and their families to participate permanently, even after members have left the sponsoring organization. Credit union membership has grown from about 5 million in 1950 to about 60 million today, indicating that credit unions, like taxable thrifts, now effectively serve the general public. Moreover, credit unions are becoming more like savings and loans and mutual savings banks in the services they offer. A significant number of credit unions now offer such services as first and second mortgages, direct deposit, automatic teller access, preauthorized payments, credit cards, safe deposit boxes, and discount brokerage services.

Taxable thrift institutions argue that the credit unions' tax-exempt status gives them a competitive advantage that is no longer justified by differences in potential membership or available services. Credit unions contend, however, that the original

reason for their special tax treatment--that they operate without profit and solely for the benefit of their members--continues to justify their special status. Credit unions also point out that their depositors tend to manage them more closely, since their statutes generally require the boards of directors to be drawn from the membership--a management structure that is not oriented toward making profits.

The credit union industry also argues that only undercapitalized unions would be subject to tax because such credit unions would need to earn profits in order to build up their capital. Collecting a tax on their profits would make it more difficult for undercapitalized credit unions to build up needed capital. The majority of healthy credit unions, however, are not obligated to earn any profits; they could avoid earning profits and thus escape the tax by paying higher deposit rates or charging lower loan rates.

These arguments of the credit union industry may be countered in several ways. First, competing thrift institutions that are profitable but undercapitalized pay taxes. Second, when undercapitalized financial institutions report losses, they can recoup some of their losses from the Treasury as offsets against taxes paid in previous years. Finally, if credit unions were to pay higher deposit rates in an effort to avoid taxes, their depositors would receive more income and pay more income tax. Similarly, if the credit unions charged lower mortgage interest rates, their members would have lower tax deductions for mortgage interest and therefore also pay more income tax.

**REPEAL TAX PREFERENCES
FOR EXTRACTIVE INDUSTRIES**

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Repeal Percentage Depletion	0.5	1.1	1.1	1.2	1.2	5.0
Repeal Expensing of Intangible Drilling, Exploration, and Development Costs	1.1	2.0	2.0	2.0	2.1	9.1

SOURCE: Joint Committee on Taxation.

Under the normal rules for cost recovery, purchases of capital assets such as plant and equipment cannot be fully deducted when purchased. Instead, the purchase price must be capitalized as a business asset and written off at a prescribed rate over the asset's useful life either through depreciation or depletion. These rules also apply to so-called "self-constructed" assets, which are constructed by the user rather than purchased. Although oil and gas wells and mineral mines are self-constructed assets, they enjoy special cost recovery rules. The expensing of certain exploration and development costs, including intangible drilling costs, allows an immediate write-off of costs that would otherwise have to be capitalized and written off more slowly. Percentage depletion allows write-offs that often exceed capitalized costs.

Expensible exploration and development costs include costs for excavating mines and drilling wells. They also include prospecting costs for hard minerals, but not for oil and gas. For corporations engaged in hard mineral extraction and for so-called "integrated" producers of oil and gas who also operate sizable refineries, expensing is limited to 70 percent of these costs, with the remaining 30 percent deducted over a 60-month period.

Percentage depletion allows a certain percentage of a property's gross income to be deducted, regardless of the actual capitalized costs. Nonintegrated oil and gas companies are allowed to deduct 15 percent of the gross income from their first 1,000 barrels per day of oil and gas production each year. (Integrated oil and gas producers are required to use normal cost depletion to recover capitalized costs.) Hard mineral producers are also allowed to use percentage depletion at varying statutory rates. Minerals eligible for percentage depletion include sand (5 percent), coal (10 percent), iron ore (14 percent), dimension stone and mollusk shells (14 percent), oil shale (15 percent), gold (15 percent), and uranium (22 percent). The allowance for percentage depletion is limited to 50 percent of the net income from the mineral property after production costs.

Because percentage depletion depends on the value of production rather than the amount of capitalized costs, it is more akin to a production subsidy than a method of cost recovery. However, the subsidy provides little or no incentive to develop or expand production from marginal properties because the amount of percentage depletion is limited by net income. Higher production costs for marginal properties reduce net income and therefore limit the amount of percentage depletion allowed. (OBRA90 raised the net income limitation for oil and gas from 50 percent to 100 percent to allow more percentage depletion to be claimed.)

Percentage depletion and the expensing of exploration and development costs encourage oil and gas production and hard mineral extraction, but the incentives are not available to all producers on an equal basis. Integrated oil and gas producers are denied percentage depletion deductions that others receive. Furthermore, most corporations can expense only 70 percent of their exploration and development costs including intangible drilling costs, while noncorporate producers can expense all of them. Finally, producers who pay the alternative minimum tax must defer or even forgo deductions for percentage depletion and expensable exploration and development costs, while producers who pay the regular income tax may take them currently. (OBRA90 allows non-integrated oil and gas producers to deduct more of their intangible drilling costs under the minimum tax when the price of oil falls below \$28 per barrel.)

Several arguments for repealing expensing and percentage depletion can be made. First, these provisions allocate capital to drilling and mining that could be used more productively elsewhere in the economy. Second, they encourage the use of scarce domestic oil and gas resources--a policy of "draining America first"--which may lead to a greater reliance on foreign energy producers in the future. Third, their effectiveness in encouraging production is lessened by their failure to provide all producers with the same incentive.

Repealing the expensing of intangible drilling costs and other exploration and development costs would raise about \$9 billion in 1992 through 1996, assuming that the costs of dry holes, unproductive mines, and worthless mineral rights could still be expensed. Repealing percentage depletion would raise about \$5 billion over the same five-year period.

**FURTHER RESTRICT DEDUCTIONS FOR
BUSINESS MEALS AND ENTERTAINMENT**

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Disallow Deductions for Half of Business Meal and Entertain- ment Expenses	2.3	3.6	3.8	4.1	4.3	18.1

SOURCE: Joint Committee on Taxation.

The tax code does not generally allow deductions for personal living costs, but it allows full deductions for ordinary and necessary business expenses. Expenses for business meals, entertainment, and travel are only partially deductible: taxpayers are required to show that the purpose of the expenses is related to business, and the portion of expenses that is "lavish and extravagant under the circumstances" is disallowed. In addition, deductions for business meals and entertainment are limited to 80 percent of expenses. The Congress imposed these restrictions because it was concerned that some taxpayers were deducting personal living expenses as business expenses. Even when connected with a taxpayer's business, expenditures for items such as parties, meals, tickets to theater and sports events, and country club dues provide substantial personal benefit to the taxpayer and other recipients. Deductibility of these expenses provides a tax subsidy that is not available to those who make meal and entertainment purchases outside a business setting. This tax subsidy could be further reduced by lowering the 80 percent limit. For example, limiting deductions to 50 percent of expenses for business meals and entertainment would raise revenues by about \$18 billion in 1992 through 1996.

Determining the component of expenses for meals and entertainment that represents ordinary and necessary business expenses as distinguished from the part that represents personal consumption is necessarily arbitrary; some might regard 50 percent as too stringent a standard. In addition, the proposal could have negative effects on some restaurants and on the professional sports and entertainment industries because business customers provide them with a large fraction of their income.

REV-23 ELIMINATE PRIVATE-PURPOSE
TAX-EXEMPT BONDS

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Eliminate All Private-Purpose Tax-Exempt Bonds	0.2	0.5	0.9	1.3	1.5	4.4
Raise Cap and Extend Volume Limits to New Issues of All Private-Purpose Bonds	0.1	0.3	0.4	0.5	0.6	1.9

SOURCE: Joint Committee on Taxation.

State and local governments have for many years issued bonds exempt from federal taxation to finance public investments such as schools, highways, and water and sewer systems. Beginning in the 1970s, these governments began to issue a growing volume of tax-exempt bonds to finance quasi-public facilities, such as ports and airports, and private-sector projects, such as housing and shopping centers. These bonds eventually became known as "private-purpose" bonds because the ultimate users of the tax-exempt financed facilities were private nongovernmental entities.

Private-purpose tax-exempt bonds include mortgage revenue bonds for rental housing and single-family homes for low-income and middle-income households; industrial development bonds (IDBs) used by private firms for a wide variety of purposes; student loan bonds issued by state authorities to increase funds available for guaranteed student loans; and bonds for nonprofit institutions, such as hospitals and universities.

Although private-purpose bonds provide subsidies for arguably worthwhile activities, tax-exempt financing is not the most efficient way to provide assistance. With a direct subsidy, the benefit goes entirely to the borrower. With tax-exempt financing, the benefit is shared between the borrower of funds and the investor in tax-exempt bonds. In addition, because tax-exempt financing is a tax expenditure instead of a budget outlay, it is not routinely reviewed during the annual budget process.

The Congress has placed restrictions on the use of tax-exempt financing several times, beginning in 1968. During the 1980s, these restrictions have included limiting the volume of new issues of tax-exempt bonds for some activities and setting

expiration dates on the use of tax-exempt financing for other activities. Some of the expiration dates, however, have been routinely postponed.

The Tax Reform Act of 1986 (TRA) made the alternative minimum tax applicable to interest earned on newly issued private-purpose bonds and placed a single state-by-state limit on the volume of new issues of IDBs, student loan bonds, and housing and redevelopment bonds. The new state volume limits, which are more restrictive than those previously in force, are the greater of \$50 per resident or \$150 million a year. Bonds for publicly owned airports, ports, and solid waste disposal facilities, and bonds for nonprofit 501(c)(3) organizations (primarily hospitals and educational institutions) are exempt from the new volume limits. Large private universities and certain other nonprofit institutions may not issue tax-exempt bonds if they already have more than \$150 million in tax-exempt debt outstanding.

If the Congress were to eliminate tax exemption for all new issues of private-purpose bonds, revenue gains would be about \$4 billion in 1992 through 1996, assuming that at least some construction of airports, and sewage and solid waste facilities would qualify for tax-exempt financing as governmental in nature. Eliminating the tax exemption would eventually raise the cost of the services provided by nonprofit hospitals and other facilities that currently qualify for tax-exempt financing, but the cost increase would be small and gradual.

Including all bonds for private nonprofit and quasi-public facilities in a single state volume limit while raising the limits beginning in 1991 to \$75 per capita or \$200 million a year would raise about \$2 billion in 1992 through 1996. These changes would curb the growth of all private-purpose bonds without sharply reducing their use. The curb would primarily affect bond issues for nonprofit hospitals, which are not included in the current cap. Advocates of limiting or eliminating these bonds question the need for any subsidy when the supply of hospital beds seems to be adequate; opponents hold that such limitations will raise health care costs. Bonds for airport facilities for the exclusive private use of airlines under long-term leases, such as departure gates, would also be curtailed, but public airport facilities, such as runways and control towers, could continue to be financed with the tax-exempt bonds as government facilities.

ELIMINATE OR RESTRICT DEDUCTIBILITY OF STATE AND LOCAL TAXES

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Eliminate Deductibility of State and Local Taxes	13.8	34.8	36.8	40.2	43.9	169.5
Maintain Deductibility of Taxes Above Floor of 1 Percent of AGI	1.6	5.5	5.8	6.4	7.0	26.2
Prohibit Deductibility of Taxes Above Ceiling of 8 Percent of AGI	1.8	6.0	6.1	6.6	7.2	27.7

SOURCE: Joint Committee on Taxation.

Under current law, taxpayers may deduct state and local income, real estate, and personal property taxes from their adjusted gross income (AGI). The deductions mean, in effect, that the federal government subsidizes the state and local tax payments of taxpayers who itemize. This subsidy may cause itemizers to support higher levels of state and local services than they would otherwise; to the extent that this is true, the deductions may indirectly finance increased state and local government spending at the expense of other uses of federal revenues. The Tax Reform Act of 1986 reduced the subsidy to state and local governments directly, by repealing the deduction for state and local sales taxes, and indirectly by increasing the standard deduction and lowering marginal rates, thus reducing both the number of itemizers and the value of the deductions. The Omnibus Budget Reconciliation Act (OBRA) of 1990 further reduced total allowable deductions (other than medical expenses, casualty and theft losses, and investment interest) by an amount equal to 3 percent of a taxpayer's AGI in excess of \$100,000.

Deductibility of state and local taxes has drawn criticism on several grounds. First, the deductions reduce federal tax liability only for itemizers and, because the value of an additional dollar of deductions increases with the marginal tax rate, the deductions are worth more to higher-bracket taxpayers. Second, deductibility favors wealthier communities; the higher the income level in a community, the more itemizers it will have, and thus the greater the likelihood that residents of the community will support a higher level of spending. Third, deductibility may discourage states and localities from financing services with nondeductible user fees, thus discouraging efficient pricing of some services.

Supporters of deductibility argue that it is needed because a taxpayer with a large state and local tax liability has less ability to pay federal taxes than one with equal total income and a smaller state and local tax bill. However, a taxpayer who pays higher state and local taxes may also receive more benefits from publicly provided services, such as public recreational facilities. In this case, the taxes are more like other payments for goods and services (for example, private recreation) and should not be deductible.

Supporters of deductibility also note that any higher public expenditures resulting from deductibility benefit all members of a community, including lower-income nonitemizers who do not receive a direct tax saving. Increased spending on such public goods as education, transportation, and pollution control may also have spillover benefits for residents outside the taxing jurisdiction. Further, since some direct federal grants-in-aid to states and localities have been reduced or terminated in the past few years, the need for deductibility may have increased.

Limiting the value of the state and local deduction could raise significant revenues. Eliminating deductibility would raise about \$170 billion in 1992 through 1996. Most of the incentive effect of the present deductions on public spending could be preserved if the deductions were permitted only for state and local tax payments above a fixed percentage of AGI. The average itemizer's state and local tax deductions exceed 1 percent of AGI in every state. If the floor was set at 1 percent, revenues in 1992 through 1996 would increase by more than \$26 billion. Another alternative would be to prohibit deductions above a fixed ceiling, which also might be a percentage of AGI. A ceiling set at 8 percent of AGI would increase revenues by a roughly similar amount--\$28 billion in 1992 through 1996. A floor and a ceiling would have very different effects on incentives, however. With a floor, the incentive for increased state and local spending would remain; with a ceiling, the incentive would be reduced, but state taxes might become less progressive.

**IMPOSE A VALUE-ADDED OR
NATIONAL SALES TAX**

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
5 Percent Rate, with Comprehensive Base	--	83.0	133.0	140.0	146.0	502.0
5 Percent Rate, with Exemptions for Food, Housing, and Medical Care	--	48.0	77.0	80.0	84.0	289.0

SOURCE: Joint Committee on Taxation.

NOTE: Estimates are based on an effective date of January 1, 1993, and are net of reduced income and payroll tax revenues, but do not reflect added administrative costs.

A value-added tax (VAT) is a form of general sales tax in use in 19 of the 24 countries of the Organization for Economic Cooperation and Development, and in many other countries. It is typically administered by taxing the total value of sales of all firms, but allowing firms to claim a credit for taxes paid on purchases from other firms of raw materials, intermediate materials, and capital goods. In the aggregate, the tax base equals sales to final consumers. Another method of taxing the same base would be to impose a national retail sales tax.

A 5 percent VAT on a broadly defined consumption base (see table) would increase net revenues by about \$83 billion in fiscal year 1993 and by roughly \$502 billion through 1996. At the same rate, a VAT on a narrower base (see table) would net about \$48 billion in 1993 and about \$289 billion through 1996. These projections assume that collections would not begin until January 1, 1993, because the Internal Revenue Service has estimated that it would take approximately 18 months after the date of enactment to begin to administer a VAT.

If a large amount of revenue is to be raised, a VAT might be preferable to an income-tax increase because it is theoretically neutral between present and future consumption. Thus, it would not adversely affect incentives for saving and investment, as an equal increase in income taxes would. In addition, a broad-based VAT with a single rate would distort economic decisions less than would an equal-revenue increase in selective consumption taxes. The VATs that have been enacted in other countries, however, include many tax preferences and multiple rates. Such a VAT would distort consumption choices more than a single-rate, broadly based VAT and could be more distorting than higher income tax rates.

**SAMPLE CALCULATION OF BROAD AND NARROW VALUE-ADDED TAX
BASE, 1989 (In billions of dollars)**

Items Included in Tax Base	Amount
Total Personal Consumption in GNP	3,450
Less:	
Rental value of housing	534
Net foreign travel expenditures	1
Religious and welfare activities	83
Plus:	
New residential construction	204
Broad VAT Tax Base	3,036
Possible Exclusions from the Base ^a	
New residential construction	204
All medical care (including insurance)	484
Food purchased for off-premises consumption (excluding alcohol beverages)	395
Food furnished to employees	10
Food produced for farm consumption	1
Brokerage, banking, and life insurance services	173
Local transit (excluding taxis)	5
Clubs and fraternal organizations	6
Toll roads, etc.	2
Private education and research	64
Narrower VAT Tax Base	1,692

SOURCE: Congressional Budget Office, based on national income and product accounts.

a. The excluded amount assumes that consumption is taxed at a zero rate.

The major argument used against a VAT is that it is regressive when compared with annual income: the tax per dollar of consumption is the same for all taxpayers, but the ratio of consumption to income falls for people in higher income groups. A VAT would appear less regressive when compared with income measured over a longer period of time because incomes fluctuate more than consumption.

A VAT could be made less regressive by granting tax preferences for goods and services consumed by low-income people, although such exemptions would substantially increase costs of enforcement and compliance and would reduce revenues from a VAT. Another way to offset regressiveness would be to allow additional exemptions or refundable credits for low-income people under the federal income tax, though this would reduce the revenue gains from the VAT and would cause many people to file tax returns who otherwise would have no need to file. Another alternative might be to include food and medical care in the narrower tax base, but to increase payments to low-income individuals through existing means-tested programs.

In addition to concerns about the distributional effects of adopting a VAT, several other arguments are made against the tax. Most analysts believe that imposing a VAT would cause the price level to rise. Such a one-time increase in the price level could lead to further rounds of inflation, though this result would depend on monetary and fiscal policies. State and local governments would regard a federal sales tax as interfering with their traditional revenue base. The large revenue-raising potential of a federal VAT is of concern to some people who fear it might facilitate undue growth of the federal government. Finally, a federal VAT would impose compliance costs on the firms paying the tax and claiming credits, and would require new collection and enforcement personnel and procedures. In 1984, the Treasury Department estimated that a VAT would require 20,000 additional personnel at an annual cost of about \$700 million. Because the administrative and compliance costs per dollar of revenue collected would be high when compared to other federal taxes, some analysts argue that it would be inefficient to impose a VAT at rates below 5 percent.

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Impose Tax on Domestic and Imported Oil (\$5 per barrel)	12.2	16.3	16.8	17.5	18.2	80.9
Impose Oil Import Fee (\$5 per barrel)	7.5	10.5	11.3	12.3	13.3	54.9
Increase Motor Fuel Taxes (12 cents per gallon)	11.9	11.5	11.4	11.4	11.8	58.0
Impose Broad- Based Tax on Energy Consumption (5 percent of value)	11.2	14.8	15.3	15.7	16.3	73.3

SOURCE: Joint Committee on Taxation.

- a. Estimates are net of reduced income and payroll tax revenues. Increases in federal government expenditures for energy products under these options are not estimated. The revenue estimates are based on CBO's baseline oil price forecast of \$25 per barrel over the five-year projection period from 1992 through 1996. The effective date for all of these proposals is October 1, 1991.

Increasing energy taxes could raise significant amounts of revenue, encourage conservation by making energy more expensive, reduce pollution and decrease the country's dependence on foreign oil suppliers. Before the Mideast War, the United States depended on foreign sources for nearly half of the oil it consumed, and about a fifth of its total energy. The fraction of imported oil dipped in the fall of 1990 and winter of 1991 to about 40 percent. However, this reduction is temporary. It stems from the large drawdown of oil inventories in the fall of 1990 and winter of 1991 caused by the reduced foreign supplies resulting from Iraq's invasion of Kuwait and the United Nations trade embargo, reduced demand caused by the recession and higher oil prices, and the mild winter weather. Recent experience illustrates that this dependence on foreign sources exposes the U.S. economy to potential interruptions in energy supplies and to volatile energy prices.

Imposing new or higher energy taxes would raise energy prices and reduce energy consumption, thus helping to preserve recent conservation gains that might otherwise be lost because of lower world oil prices. To the extent that taxes on oil reduce the demand for imported oil, foreign suppliers would absorb part of the tax through lower world oil prices. To the extent that energy taxes reduce energy consumption, they would also reduce carbon dioxide emissions and could, therefore, contribute to efforts to reduce global warming.

One argument against energy taxes is that they are regressive because they would absorb a larger fraction of family incomes for low-income taxpayers, who spend a higher percentage of their income on energy than do high-income families. Regressiveness can be measured against annual expenditures, instead of income; using this measure, energy taxes appear almost proportional. (See Congressional Budget Office, *Federal Taxation of Tobacco, Alcoholic Beverages, and Motor Fuels*, August 1990.) Whichever measure is used, the regressiveness of energy taxes would be offset somewhat if the taxes caused an increase in the Consumer Price Index that led to higher benefits from indexed transfer programs. It also could be offset by adjustments in income tax rates and by direct energy subsidies for low-income people.

Energy taxes have been opposed on several other grounds. They could have widely different effects in different parts of the country. For example, taxes that increase the relative price of fuel oil would have the greatest consumer impact on the Northeast, while taxes that increase the relative price of gasoline would have the greatest consumer impact on the West. (See Congressional Budget Office, *The Budgetary and Economic Effects of Oil Taxes*, April 1986.) Further, some observers argue that stockpiling oil is a better way of coping with the risks of increased dependence on imports because it would not artificially reduce current energy use by households and businesses. This argument is based on the premise that, aside from the problem of supply interruption, world energy prices accurately reflect real resource costs and thus already provide an appropriate incentive for energy conservation. Finally, direct taxes on carbon dioxide emissions may be a more efficient means of reducing global warming (see REV-29).

Excise Tax on Domestic and Imported Oil. An excise tax of \$5 per barrel on all crude oil and refined petroleum products—both domestically produced and imported—would raise revenues by about \$81 billion in 1992 through 1996. It could increase the price of a gallon of gasoline or fuel oil by as much as 12 cents.

A tax on oil would increase the price that consumers must pay, giving them an incentive to use less oil either through conservation efforts or by switching to an alternative source of energy such as natural gas or coal. The tax would cause oil reserves to decline in value, and coal and gas reserves to increase in value. These shifts in value would discourage the exploration and production of oil and would encourage the production of coal and natural gas.

An oil tax, whether on all oil or only imported oil, would raise the costs for industries that use oil as the primary production input (for example, petrochemicals

and paints). It would make it more difficult for domestic companies in these industries to compete with foreign companies that would pay less for oil.

Since 1981, the average cost of a barrel of oil has dropped from about \$35 to under \$15 in June 1990. Prices rose to \$33 per barrel in October 1990 following Iraq's invasion of Kuwait but have decreased to about \$20 per barrel following the conclusion of the Mideast War. A \$5-per-barrel oil tax would partially offset the longer-term price reduction, thereby encouraging the conservation of oil and the development of alternative energy sources. The tax would still leave consumers paying significantly lower prices than 10 years ago. It could, however, further depress the after-tax prices that suppliers of oil receive.

Oil Import Fee. As an alternative to placing an excise tax on all oil, the Congress could impose the tax only on imported crude oil and refined petroleum products. This type of tax was discussed during the deliberations over the budget resolutions for fiscal years 1986, 1987, and 1988. An oil import fee of \$5 per barrel would raise revenues by about \$55 billion in 1992 through 1996.

An oil import fee would allow domestic suppliers to charge a higher price and still remain competitive with imports, providing an incentive to increase domestic production and a windfall to domestic oil producers. Like the tax on all oil, the fee would also maintain incentives for conservation by increasing energy prices. These effects would reduce U.S. dependence on foreign oil in the short term, although long-term dependence might be increased if U.S. oil supplies were depleted faster. Opponents of an oil import fee argue that the United States should take advantage of cheap foreign oil to preserve the more costly U.S. reserves for future use. Several provisions of the Omnibus Budget Reconciliation Act of 1990 extended and increased tax incentives to produce fossil and alternative fuels. The President's National Energy Strategy Plan also includes tax incentives to increase fuel production, as well as, provisions to expand government leasing of lands.

Because an oil import fee would reduce demand and prices for imported oil, some important U.S. trading partners might object to it (though others who are net energy importers would benefit from lower world energy prices). Exempting oil imports from such trading partners as Canada, Mexico, and the United Kingdom, however, would substantially reduce the fee's revenue potential. Imports from these countries now account for about 20 percent of U.S. oil imports.

An oil import fee would have different effects in different regions of the country. On net, it would benefit oil-producing states, because producers would receive higher prices, but oil-consuming states--especially in the Northeast--would bear much of the burden of the tax and of the higher prices U.S. oil producers receive.

An oil import fee would cause expenditures for oil products to increase by about 10 percent, but only about 30 percent of this increase in expenditures would result in added federal revenues. The remainder would increase the incomes of domestic oil producers. Thus, the inflationary effect relative to the revenue collected would be higher for an oil import fee than for most other taxes on selected products.

Additional Motor Fuel Excise Taxes. Federal motor fuel taxes are currently 14.1 cents per gallon of gasoline and 20.1 cents per gallon of diesel fuel. These taxes were increased by 5 cents per gallon in December of 1990 by the Omnibus Budget Reconciliation Act of 1990. Before OBRA, all of the revenue from these taxes was earmarked for the federal Highway Trust Fund (HTF) which pays for constructing and improving interstate highways, bridges, and mass transit facilities, and for the Leaking Underground Storage Tank Trust Fund, which funds cleanup of leaking petroleum storage tanks when no financially solvent owner can be found. Revenue from half of the 5-cent-per-gallon OBRA tax rate increase will remain in the general fund. The other half of the revenue increase will be deposited into the HTF. This is the first time since the trust fund's inception in 1956 that all motor fuel revenue is not deposited into a trust fund.

State governments also impose gasoline and diesel taxes ranging from 7.5 cents to almost 27 cents per gallon. At least 30 states have increased motor fuel tax rates in 1990; some have increased tax rates several times. However, compared with motor fuel tax rates in other countries, many of them well over \$1.00 a gallon, U. S. tax rates are still among the lowest in the world.

An additional 12-cent federal tax on motor fuels would raise revenues by about \$58 billion in 1992 through 1996—\$1 billion per year for each cent per gallon of tax. Because the average national price of all grades of gasoline has dropped from a peak of about \$1.39 per gallon in March 1981 to under \$1.20 in the spring of 1991 (a reduction of 40 percent in real terms), an additional tax of 12 cents per gallon would not put the total cost of gasoline above what consumers have already experienced. If the additional tax revenues were used to support additional spending from the Highway Trust Fund that otherwise would not be made, they would not reduce the deficit. One way to ensure that the additional revenues were used for deficit reduction would be not to allocate them to the Highway Trust Fund.

The tax increase would reduce consumption of gasoline and diesel fuel by encouraging people to drive less or purchase more fuel-efficient cars and trucks. Some proponents of the tax view it as an appropriate charge for the costs of pollution and road congestion associated with automobile use. Another advantage of a motor fuel tax increase is that it would not have the same adverse effects on the international competitiveness of U.S. firms as other energy taxes. This advantage results from the fact that most gasoline and diesel fuel is used either by consumers or in the domestic transportation sector, not as an input in industrial production.

Opponents of a motor fuel tax rate increase argue that it would impose an unfair burden on the trucking industry and on people who commute long distances by car, who are not necessarily the highway users who impose the highest costs of pollution and congestion on others. These costs are much higher in densely populated areas, primarily in the Northeast, whereas per capita consumption of motor fuel is highest in sparsely populated states, mostly in the West.

A rate increase could lead to more tax evasion. Compliance with the motor fuel taxes is already a problem. It is particularly difficult to enforce the tax on diesel fuel

because the same product can be sold as nontaxable home heating oil or as taxable diesel motor fuel. In addition, sales of motor fuels to some users are tax-exempt. However, recent legislation has reduced opportunities to evade the tax by changing the collection points to earlier stages of the production and distribution process.

Broad-Based Tax on All Energy. An alternative to selective excise taxes would be a broad-based tax on all forms of energy consumption. A national energy tax would heighten incentives for conservation and reduce consumption of all forms of energy. Further, because the tax would apply to all energy sources, it would raise much more revenue at a lower rate than selective taxes. The tax could be imposed as a fraction of the value of fuel, or could be based either on units produced (such as barrels of oil, tons of coal, or cubic feet of gas) or on the heat content of the fuel measured in British thermal units (Btu). Unlike a Btu or per-unit tax, a tax on the retail value of energy would not change relative fuel prices and would not encourage consumers to switch from one form of energy to another. Tax evasion, however, would be a problem with such a tax because a very large number of retailers would be involved in its collection. If the tax were imposed at an earlier stage of the distribution process, tax evasion would be less of a problem, but the tax would then distort relative prices because different fuels have different markups at the retail level. These distortions, however, would be smaller than for taxes imposed on selected fuels. A 5 percent tax on the value of energy consumption, including coal, petroleum, natural gas, hydroelectricity, and nuclear power, would raise about \$73 billion in 1992 through 1996.

Other options would be preferable to a broad-based energy tax if revenue was not the only objective. For example, if the objective was to decrease dependence on imported oil, an oil import fee might be preferred; if the objective was to encourage the use of nuclear energy to reduce global warming, a tax based on the carbon content of fuel might be preferred (see REV-29).

REV-27 INCREASE EXCISE TAXES

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Raise Cigarette Tax to 32 Cents per Pack	1.2	1.5	1.5	1.5	1.5	7.2
Increase Taxes on Distilled Spirits, Beer, and Wine to 25 cents per Ounce of Ethyl Alcohol	3.3	4.5	4.6	4.6	4.6	21.6
Index Current Cigar- ette and Alcohol Tax Rates for Inflation	0.3	0.8	1.3	1.8	2.4	6.6

SOURCE: Joint Committee on Taxation.

NOTE: Estimates are net of reduced income and payroll tax revenues.

Federal alcohol and tobacco taxes raised just under \$10 billion in 1990, including \$3.8 billion from the tax on distilled spirits, \$1.7 billion from the tax on beer, \$0.3 billion from taxes on wines and champagne, and \$4.1 billion from taxes on tobacco.

The Omnibus Budget Reconciliation Act of 1990 raised federal excise taxes on tobacco and alcoholic beverages. The excise tax on all tobacco products was increased by 50 percent, raising the tax on a package of cigarettes from \$0.16 to \$0.20 on January 1, 1991 and to \$0.24 per pack on January 1, 1993. Excise taxes on distilled spirits were increased from \$12.50 to \$13.50 per proof gallon effective January 1, 1991. Excise taxes on beer were generally doubled from \$9.00 to \$18.00 per barrel. The tax rate on wine, which generally ranged from \$0.17 to \$2.40 per wine gallon, was increased to \$1.07 to \$3.30 per wine gallon. When fully implemented, these changes are projected to increase annual tobacco and alcoholic beverage tax revenues by about \$4.5 billion.

Despite these increases, federal tax rates on tobacco, distilled spirits, beer, fortified wines, and champagne remain lower in constant dollars than they were forty years ago. Taxes on table wine are now higher than they have been in constant dollars than any time in the past forty years. From 1951 through 1982 the tax on cigarettes was \$0.08 per pack. The 1951 rate was equivalent to over \$0.35 per pack measured in today's dollars. The tax rate on distilled spirits was \$10.50 per proof gallon from 1951 to 1985. The 1951 tax rate was equivalent to over \$45 per proof

gallon in today's dollars. The 1951 tax rate on beer was more than twice the constant dollar equivalent rate today.

Current federal excise taxes on beer and wine are much lower than federal excise taxes on distilled spirits in terms of the tax per ounce of alcohol. While the tax on distilled spirits of \$13.50 per proof gallon, is equal to about \$0.21 per ounce of alcohol, the tax on beer of \$18.00 per barrel, is roughly equal to \$0.10 per ounce of alcohol (assuming an alcoholic content of 4.5 percent), and the tax on table wine of \$1.07 per gallon, is about \$0.08 per ounce of alcohol (assuming an average alcoholic content of 11 percent).

Smoking and drinking have social costs. To the extent that these costs are not reflected in market prices for cigarettes or alcoholic beverages, higher taxes might be a way to make smokers and drinkers bear more of the social costs of consumption. In addition, by pushing up prices, higher taxes might discourage consumption of cigarettes and alcoholic beverages. Equalizing the taxes on distilled spirits, beer, and wine at the same level per ounce of ethyl alcohol might be justified, if distilled spirits, beer, and wine impose the same external costs per ounce of alcohol consumed.

If higher taxes caused prices to exceed the costs that smokers and drinkers impose on society, however, the taxes would discriminate against smokers (roughly 30 percent of the adult population) and drinkers. Higher taxes would also discriminate against moderate and infrequent smokers and drinkers, if economic costs are chiefly attributable to excessive smoking and drinking. In addition, taxes on cigarettes and alcohol are regressive. Higher taxes would have a heavier impact on households with low incomes than on households with high income. (See Congressional Budget Office, *Federal Taxation of Tobacco, Alcoholic Beverages, and Motor Fuels*, August 1990).

Increase the Cigarette Tax. Raising the federal excise tax on cigarettes to 32 cents per pack on October 1, 1991, would increase net revenue by about \$7 billion between 1992 and 1996.

Increase Taxes on Alcoholic Beverages. Increasing the current federal excise taxes on distilled spirits, beer, and wine to \$16.00 per proof gallon effective October 1, 1991, would raise about \$22 billion between 1992 and 1996. A tax of \$16.00 per proof gallon would be equivalent to a tax of 25 cents per ounce of ethyl alcohol. Increasing the tax to \$16.00 per proof gallon would raise the tax on a 750 milliliter bottle of distilled spirits from about \$2.14 to \$2.54, the tax on a six-pack of beer from about \$0.33 to \$0.81, and the tax on a 750 milliliter bottle of table wine from about \$0.21 to \$0.70.

Index Cigarette and Alcohol Tax Rates for Inflation. Indexing current cigarette and alcohol tax rates to changes in the Consumer Price Index after October 1, 1992, would raise about \$7 billion between 1992 and 1996. Indexing these taxes would prevent inflation-induced erosion of real tax rates and would avoid the need for abrupt increases in the future.

An alternative to indexing would be to convert the unit taxes to ad valorem taxes set as percentages of manufacturers' prices. This method would link tax revenues to price increases, although revenue would be tied to prices of taxed goods, not the general price level. A shortcoming of the ad valorem tax is that it might create an incentive for manufacturers to lower sales prices artificially to company-controlled wholesalers, in order to avoid part of the tax.

REV-28 IMPOSE AN EXCISE TAX ON WATER POLLUTANTS

	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
Addition to CBO Baseline ^a	1.5	2.4	2.4	2.4	2.4	11.0

Source: Joint Committee on Taxation.

a. Estimates are net of reduced income and payroll tax revenues. The effective date for this proposal is January 1, 1992.

Over 60,000 facilities discharge nearly 300 billion gallons of wastewater per day directly into lakes, rivers, estuaries, and oceans. Taxing pollutants contained in the wastewater could raise substantial amounts of additional revenue, while creating incentives for additional abatement.

One common indicator of water quality is biological oxygen demand (BOD). BOD measures the amount of oxygen-demanding wastes in a body of water. Dissolved oxygen is necessary to sustain fish and other aquatic life. Decomposition of organic pollutants such as those in municipal sewage, or chemicals, such as those in industrial wastes, depletes the natural oxygen level. About 17 million pounds of such pollutants are discharged per day. Nearly 13 million pounds are discharged by publicly owned treatment works (POTWs); most of the remainder is discharged by paper and pulp mills, food processors, metal producers, and chemical plants.

Excise taxes on pollution could have economic advantages over some alternative revenue sources. First, pollution taxes tend to discourage activities that impose costs on society, such as polluting, and may be preferred to taxes that adversely affect incentives to work and save. Second, to the extent that too little pollution abatement occurs under current regulations, an excise tax could increase the level of pollution control in a cost effective manner. Pollution taxes set at or above the incremental cost of pollution abatement--that is, the cost to affected firms of eliminating an additional pound of pollutant--might encourage additional pollution abatement. In addition, pollution taxes also redistribute the social costs of allowable emissions of pollutants given current control levels. Finally, the process of tax collection, and the observed responses of firms would provide information that could be used to set future charges with more certainty about their effects on pollution levels.

Under current environmental control laws, facilities that discharge water pollutants must incur the costs needed to comply with regulations, but are not charged for allowable discharges. Taxing dischargers for these continuing emissions places an additional burden on these facilities. Moreover, to the extent that pollution charges eventually raise the prices of consumer goods, including food, they might be

regressive--that is, they might constitute a higher share of the expenditures of low-income households than of households with higher incomes.

The cost of controlling another pound of BOD at municipal treatment facilities and many industries regulated under the Clean Water Act averages between \$0.40 and \$0.70 per pound removed. A charge on BOD discharges of \$0.50 per pound could encourage abatement at many manufacturing facilities and POTWs that face lower abatement costs. Assuming that the 17 million pounds per day of BOD discharges occur continuously throughout the year, a charge at this level would raise \$11.0 billion between 1992 and 1996. Revenues would be less, however, to the extent that the tax led to abatement measures. While the tax considered here is not indexed for inflation, increasing the tax rate over time would prevent inflation from eroding either the abatement potential of the charge or the real value of revenues to the federal government. Pollutants other than those measured by BOD might also be considered as the basis for a water pollution tax, such as measured suspended solids, and heavy metals. Since some wastewater treatment processes reduce several pollutants simultaneously, discouraging one pollutant might also encourage reductions in others.

To simplify establishing a BOD-based water pollution excise tax, the discharge levels that are specified in the permits issued to every source of water pollution by state or federal governments could be used as the basis for levying a BOD tax. Levying a tax on effluents from POTWs, as well as from large industrial dischargers, would include residential and smaller industrial uses in the charge system, so that all significant point sources of effluents would be taxed. POTWs could recover costs by raising residential and commercial sewer bills and by increasing the fees charged to industrial sources that pipe wastewater to the facilities. Including POTWs in the charge system might be more politically acceptable if the revenues were placed in a revolving fund used to finance enhanced public investment in pollution control equipment. This option becomes even more attractive as the Federal Construction Grants program for POTWs will be phased-out by 1994 and replaced by a state revolving loan program. Alternatively, the tax might be levied only on industrial sources of water pollution, excluding POTWs; doing so would limit the number of collection points and significantly reduce the tax base. Restricting the charge to non-POTW sources of pollution or designating funds to the state loan program for POTWs would reduce the revenues collected to \$3 billion between 1992 and 1996.

Currently, 39 states operate their own water pollution permitting programs under federal approval. Many of these states also collect revenues from fees based on the permits. These states might oppose a federal charge scheme if it was perceived as reducing their own fee revenues. Alternatively, the 39 states might argue that they should be able to keep a major portion of the revenues from a federal charge, thus reducing its contribution to deficit reduction.

REV-29 IMPOSE A CARBON-BASED EXCISE TAX ON FOSSIL FUELS

Addition to CBO Baseline ^a	Annual Added Revenues (in billions of dollars)					Cumulative Five-Year Addition
	1992	1993	1994	1995	1996	
CO ₂ Stabilization Tax	17.8	28.0	28.5	29.0	29.6	132.9
CO ₂ Reduction Tax	7.1	22.2	31.8	37.5	39.2	137.8

Source: Joint Committee on Taxation.

a. Estimates are net of reduced income and payroll tax revenues. The effective date for this proposal is January 1, 1992.

The so-called greenhouse effect, characterized by the trapping of some of the sun's heat within our planet's atmosphere, is necessary for life on earth. Recent scientific evidence on the potential for global warming through an intensified greenhouse effect has prompted concern about the level of fossil fuel use. Temperature changes may result from increasing concentrations of certain trace gases that trap excess solar heat in the atmosphere and thus affect the earth's climate. The most abundant trace gas is carbon dioxide (CO₂), which is produced when fossil fuels are burned. An excise tax proportional to the carbon content of coal, oil, and natural gas could generate substantial revenues, promote energy conservation, and stabilize or reduce domestic CO₂ emissions.

Imposing a carbon-based tax at the points where fossil fuels enter the economy--mine-mouth, wellhead, or dockside (for imports)--could discourage fossil fuel use and reduce subsequent carbon dioxide emissions. The tax rate on fossil fuels could be designed either to discourage future increases in CO₂ emissions or to reduce emissions from current levels by some target date. The relative carbon content of coal, oil, and natural gas would dictate the specific tax rate for each fuel. Since each fuel emits different amounts of CO₂ per unit of useful energy obtained, the tax would not only discourage fossil fuel use, but would discourage using higher emitting fuels more than lower emitting fuels. The revenue estimates presented here take into account both the projected growth in fossil fuel use in the absence of a tax, and estimated reductions in emissions in response to the tax. Under both options, the tax rate would be indexed for inflation. If the tax rate over time was not adjusted over time for inflation, the abatement incentive provided by both these options, or the revenues raised, could be less than projected.

A "CO₂ stabilization" tax of approximately \$29 (in 1992 dollars) per ton of carbon content of the three fossil fuels could nearly eliminate the projected growth in carbon dioxide emissions over the next 10 years. This tax rate is equivalent to a tax of approximately \$17.75 per ton of coal, \$3.80 for each barrel of oil, and about \$0.50 per thousand cubic feet of natural gas (in 1992 dollars, based on average carbon content). In terms of current prices of fossil fuels, the tax equals about 50 percent

of the delivered price of coal, and about 10 percent of the prices of refined petroleum and natural gas. Such a tax would raise \$133 billion in additional revenue during 1992 through 1996.

More ambitious emission targets--such as those commonly proposed in international negotiations--would require higher tax rates. A "CO₂ reduction" tax equal to \$117 (in 1992 dollars) per ton of carbon content of fossil fuels could reduce emissions from current levels by about 10 percent to 20 percent by the year 2000. The potential economic impact of such a high tax rate might warrant phasing it in over time. Phasing in this tax over 10 years could raise nearly \$138 billion in revenues during 1992 through 1996 (by which time the tax rate would be approximately \$59, in 1992 dollars). This option could reduce CO₂ emissions in the year 2000 to about 7 to 10 percent below current levels.

Critics of CO₂ reduction policy contend that the scientific evidence concerning the potential adverse effects of atmospheric CO₂ may not yet warrant immediate efforts to reduce U.S. fossil energy use. Moreover, U.S. action might not significantly reduce global CO₂ concentrations, if other countries did not make similar efforts. In addition, adjusting to lower energy use would be costly, especially in the energy extraction and processing industries and in energy-intensive manufacturing sectors in the United States. To the extent that taxes on the carbon content of fossil fuels are similar to other energy taxes, the costs of such taxes might fall disproportionately on lower-income households or on some geographical regions (see REV-26 on energy excise taxes). Finally, there may be alternative means of slowing global warming that can be carried out in both the U.S. and other countries, including controls on other greenhouse gases, efforts to slow deforestation, and research and development into new technologies for improving energy efficiency and using alternative energy sources that do not emit CO₂.